

RAIL CLASSICS

JANUARY 1976

PDC \$2.00

CLEVELAND
UNION
TERMINAL

WORLD'S
GREATEST
STEAM
COUNTRY?



ELK RIVER
LOGGING
PICTORIAL

NARROW GAUGE
TROLLEY OPERATIONS

UP'S WESTERN SHORTCUT

STEAM AND DIESEL STREAMLINING

"WHERE THE ACTION IS"

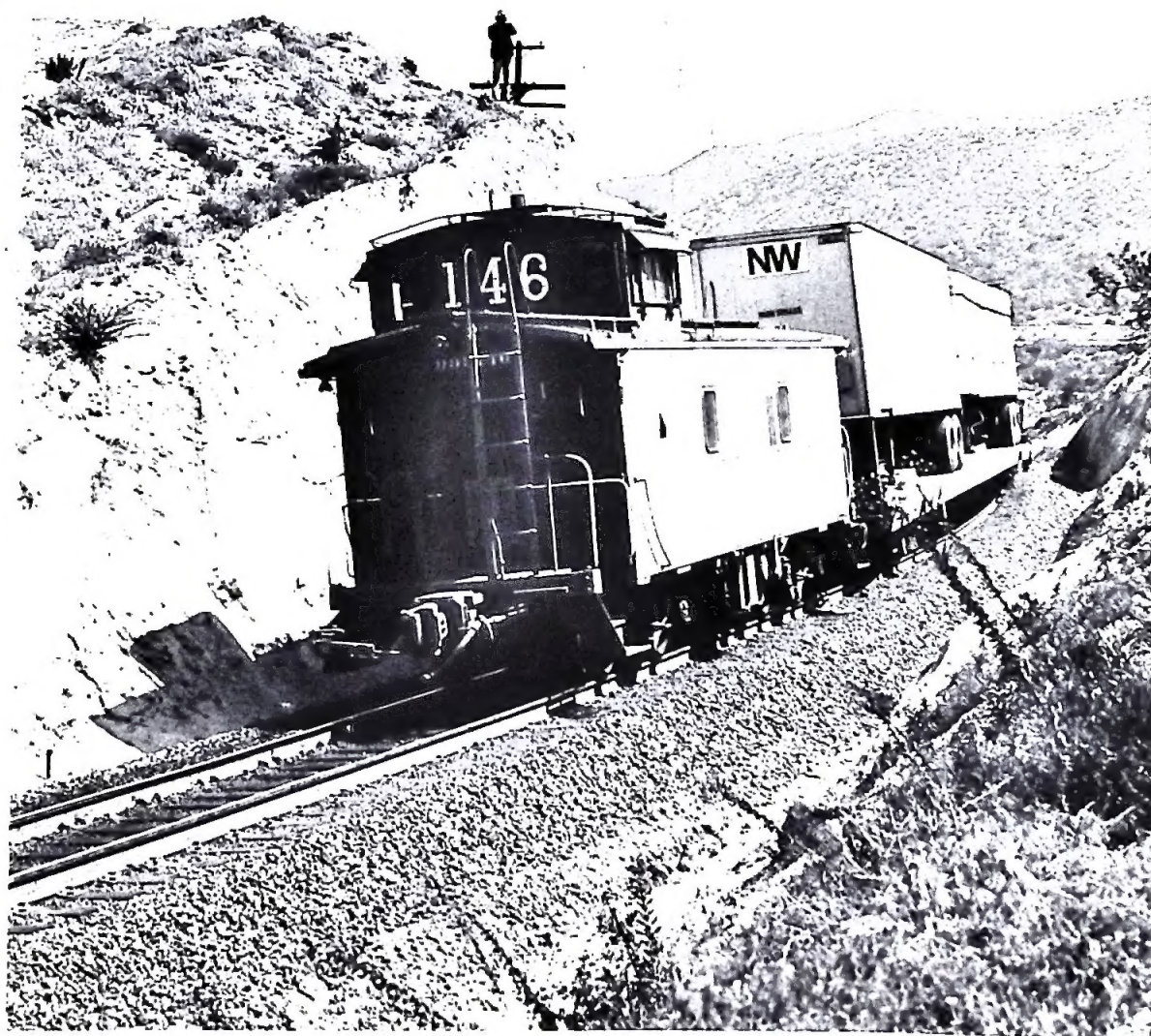
Who is that guy just above the caboose spoiling this otherwise pleasant scene of Santa Fe's Super-C easing down off of Cajon? Why it's the Editor of course.

Covering the fast paced rail scene today takes teamwork, lots of it, sometimes more than one person can handle, and many times it takes more than one pair of eyes to accurately report the story, so whenever possible RAIL CLASSICS staffers team up to doubly insure we see everything to give you, our readers, the best possible coverage.

This trip we're exploring Cajon Pass, the next might be checking a shortline going through its daily chores, another might be following the abandoned route of a once-mighty narrow-gauge empire, whether it be here in California, Bar Harbor, Maine, Vancouver, British Columbia, Guadalajara, Mexico or beyond to other continents.

Whatever the situation, wherever the action is, we're out there getting the facts and photos to give you the best in railroad journalism. Won't you join us?

am



Send to:

RAIL CLASSICS SUBSCRIPTION

7950 Deering Ave., Canoga Park, Ca. 91304

Please enter my subscription for RAIL CLASSICS for only \$9.95 for one year (six issues).

Name

Address

City State Zip

RAIL CLASSICS

JANUARY, 1976
VOLUME 5, NUMBER 1

FEATURES

- THROUGH THE RIVER** John Krause 12
The Elk River Coal & Lumber provides a look at days past in logging
- BUILT TO LAST FOREVER** Richard J. Cook 20
That's what the Cleveland Union Terminal was planned for, long ago
- U.P.'S WEST COAST SHORTCUT** Kistler/Schmeling 30
The Gibbon Cutoff sees almost everything UP owns, plus pool power
- THE STREAMLINE STYLE** Robert C. Reed 44
Streamlining swept across America touching almost every railroad
- WORLD'S GREATEST STEAM COUNTRY** Ron Ziel 48
Indonesia is the undisputed leader for steam in the seventies
- WAY OUT WEST** William D. Middleton 56
Our reminiscing photographer visits the west in steam and diesel times
- SLIM GAUGE ELECTRICS** Van Court Wilkins 64
Narrow? Yes. Small? Not necessarily!

DEPARTMENTS

Rail Mail	4
Copy 19	6
Rail Photo Clinic	8
Books	10
What's Happening	26
Photo Gallery	38
Derail	82

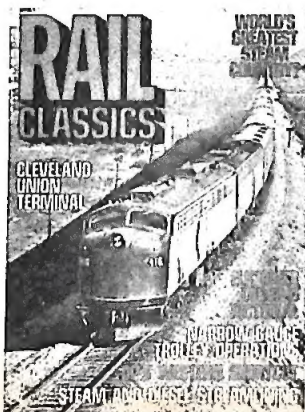
RAIL CLASSICS is published bimonthly by Challenge Publications, Inc., 7950 Deering Avenue, Canoga Park, California 91304. Copyright ©1976 by Challenge Publications, Inc. All rights reserved. Nothing in whole or in part may be reproduced without written permission of the publisher. Publisher assumes no responsibility for unsolicited material. All photos, artwork, and manuscripts must be accompanied by stamped self-addressed return envelope. Single copies \$2.00. Subscription \$12.00 for 6 issues (one year). Second class postage paid at Canoga Park, California and at additional mailing offices. Printed in U.S.A.

EDITORIAL STAFF

Denis Dunning—Editor
David Lustig—Associate Editor
Ron Ziel—Foreign Steam Editor
Stuart Diaux—Editorial Asst.
Larry Byrd—Layout/Design

CHALLENGE PUBLICATIONS

Edwin A. Schnepf—Publisher
John Ernsdorf—Art Director
Alan Kuda—Advertising Director
Chris Hamm—Advertising Coordinator
Sven Carlson—Marketing Director
Jerry Stanfield—Circulation Director
Robert Ratner—Production Director
Janet Graham—Reader's Service



THIS MONTH'S COVER—Amtrak's "San Diego" exemplifies the streamline era. In this scene just south of Carlsbad, California. For more on this subject turn to page 44. David Lustig photo.

EDITORS

Two of the nation's newest and theoretically most advanced railroads seem to be in trouble. California's BART has a new man in charge in the hopes that they can try and get back on schedule.

BART is still operating only in the daylight during the week, with no night or Sunday trains to be seen. And the schedules are critically short of the anticipated, with the resultant lack of passengers that had been hoped for. And reading remarks of the new head of BART, you get the feeling that he considers the task rather hopeless, and nothing short of a miracle will make the system even come close to the original promises.



Where BART was designed to haul nothing but passengers, the all electric Black Mesa & Lake Powell was designed to haul only coal, and do it almost totally automatic. We gave a short rundown of some of BM&LP's troubles in the May issue of RAIL CLASSICS, but a story in the August 4th issue of Business Week paints an even drearier picture.

The concrete ties are cracking under the heavy loads, the wheels are wearing out at an alarming rate, and to help ease these problems the specially built hopper cars are only being loaded to three-quarters capacity.

It looks like they will replace much of the expensive concrete tie network with wood, go to normal three-man crews, smaller cars and even an additional train. This will also mean the construction of passing sidings along the mainline that is now single track all the way. The railroad that cost a little over \$50 million to build may require an additional \$20 million to make it work the way the Salt River project needs it.

Even the automatic whistle that was supposed to blow at grade crossings seems to have a mind of its own. Quoting from Business Week "... the whistle was disconnected when it began blowing at beer cans between the rails. In time honored railroad tradition, the BM&LP's crew has given it a nickname: 'Big Mess & Lots of Problems'."

Maybe some of these new railroad designers should have a talk with the people who have been building them for the last century and a half.

SCALE R/C MODELER

An all new magazine for the
scale radio control
enthusiast from
Challenge Publications



SCALE R/C MODELER

is a new concept in the hobby magazine field. Our magazine is devoted to the idea that a model should be just that, a replica of a prototype, be it airplane or boat. We will follow the format that has made other Challenge Publications such as *Air Classics* and *Scale Modeler* leaders in their field; big photos and interesting features and technical articles.

Our magazine will include construction articles complete with plans in each and every issue. We will present three views, photographs and technical information on actual prototypes.

Each issue will carry 8-16 pages of editorial color devoted to models and prototypes, markings and paint schemes. Never before has there been a magazine quite like

SCALE R/C MODELER

so don't miss a single issue.
SUBSCRIBE TODAY and save!

SUBSCRIPTION COUPON

CHALLENGE PUBLICATIONS, INC.
7950 DEERING AVENUE
CANOGA PARK, CALIFORNIA 91304

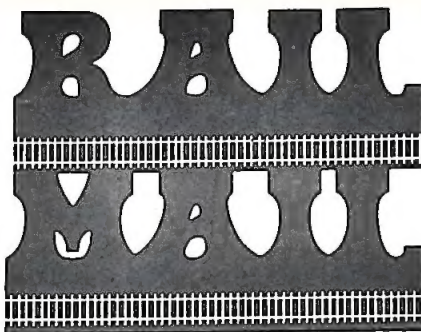
NAME

ADDRESS

CITY

STATE ZIP

Regular Newsstand Price—\$2.00 Per Copy
1 Year Subscription (6 issues) \$ 9.95
2 Year Subscription (12 issues) \$17.95



Finest Loco Challenged

The July '75 article on the S.P. Daylight locomotive was the highlight of the issue. However, the claim that it was "the finest steam locomotive ever built" is likely to be contested.

S.P. Class GS-5 engines 4458 and 4459 were a better design in that these two were roller bearing equipped on all axles. But then, the S.P. is not even in the running. The crown must go to the Northern Pacific, Santa Fe, New York Central or the Norfolk & Western. The latter's wartime "J" Class minus the later shrouding gets my nod.

Jim Byrne
Bonaire
Netherlands Antilles

Protect Your Film

Picked up the September issue of *RC* and it is another great. Do have a couple comments though.

In Rail Photo Clinic, you suggest putting the film on the floor of the car to keep it cool. It has been my experience that the floor is an extremely hot place due to the heat of the road coming up and the engine heat flowing under the car plus the exhaust pipe also adding its share of heat. So, DO NOT place film on the floor. Same for equipment. Best bet would be one of those insulated picnic bags. Some are solid walled with nice square corners perfect for film in boxes.

The Amtrak photo contest is a great idea. Guess I'd better go a digging!

Robert Harmen
Pueblo, Colo.

More on SF Zebras

In reading the article on Santa Fe's Zebras I couldn't help smiling at author Berglund's comment on page 55, "All of the 800 class RSD15s originally were zebra striped . . ." Tain't so!

I photographed #829 at Binghamton, New York fresh from the Alco plant in Schenectady as it was moving west on the Erie-Lackawanna.

Most, if not all, of the 800s moved west through Binghamton and if my memory serves me correctly either

#814 or #815 was the last to have the zebra skin.

I'll tell you that when I saw the first of the 800s that I spotted here in the jungle motif I did a real double take—I was stunned! What an animal, it was long snout and all!

J. J. Young, Jr.
Binghamton, N.Y.

Dubuque Heard From

Your article, "Angel's Flight and Other Funiculars," in the May, 1975, *Rail Classics*, says that "there were others in Dubuque . . ."

The Dubuque elevator is alive and well. I rode it last weekend.

Allan C. Williams
Riverdale, Ill.

A Slight Error

I hope that my knee-jerk reaction is prompt enough to put me among the first to call your attention, and Mr. Kenneth Feenstra's attention to the fact that the photo given to him by Mrs. Anna Blanchard, and which you published in the September issue of your "colorful publication" *Rail Classics*, is *not* a photo of "the maiden voyage of Angel's Flight."

In my own extensive collection of memorabilia, I have a similar shot of a similar group which includes a current resident of Tustin at a very tender age.

Leighton Keeling
Tustin, Calif.

Is someone pulling your leg, or are you pulling ours? Re: Photo in Sept. 1975 issue claiming to be the first run of Angel's Flight. Really!!! Everyone should know that that photo was taken at Echo Mountain on Pacific Electric Railway's fabulous Mount Lowe line, whose Great Incline dwarfed Angel's Flight in every way . . . length, steepness of grade, scenery, altitude, etc.

A commercial photographer took an identical photo as each carload of passengers arrived at Echo Mountain, then developed the photos while the people were up at Alpine Tavern, then he sold prints to the passengers on their return trip.

Chard L. Walker
Hesperia, Calif.

Boobos in Peru

Jack Neville's essay on Peru in the July issue might have been more enjoyable had it not been for a number of obvious errors. Use of the initials "CdeP" in the text is misleading, for this is the reporting abbreviation of the Cerro de Pasco Railway and *not* the Central of Peru. The latter has traditionally used "ECCP" (see photo

on page 45) or simply "FCC." Even more mystifying is the placing of the Cerro de Pasco herald above the Huancayo-Huancavelica roster.

Perhaps the most serious error concerns the journey over the Central of Peru. Passenger trains on that line reach their maximum altitude inside the Galera tunnel at 15,688 feet. La Cima is located on the freight-only Morococha branch which leaves the mainline at Ticlio and rejoins it before reaching La Oroya. The altitude at La Cima marker is 15,806 feet, with an industrial spur rising even higher to 15,844 feet. That makes the Central of Peru the world's highest railroad of any gauge, having gained that title by default when a meter gauge branch line in Chile was abandoned a number of years ago. Honors for the world's highest mainline and for the highest passenger station still have to go to the Bolivian National Railway's Rio-Mulato-Potosi line at El Condor, 15,705 feet. Finally, the silver F.C.H.H. railcars are I believe built by the English firm of Wickim, not Fiat.

On a more positive note, I can report that the F.C.H.H. as of June 1975 is still very much in steam, with the new diesels apparently going to the tourist hauling F. C. Cuzco-Santa Ana. One big change that has taken place has been the nationalization of the formerly privately owned lines, including the Central of Peru and the Cerro de Pasco, and their consolidation along with the state owned narrow gauge lines to form ENAFER (Empresa Nacional de Ferrocarriles). Eventually all locomotives and rolling stock will likely carry such identification.

John A. Kirchner
Chicago, Ill.

Steam Still Active

I enjoyed Klaus Schmidt's article about West German steam in the November 1974 issue of *RC*. I had a chance to experience this recently. I visited the terminal at Lehrte and found twenty-six 2-10-0s stationed there, with twelve under steam, twelve getting heavy repairs and only two on the dead line.

Also thought I'd let you know that Steam, Inc., a non-profit organization, is rebuilding a Northern Pacific Class S-4 4-6-0 up in Tacoma, Wash.

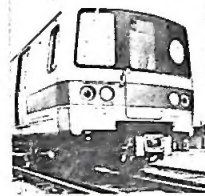
And finally, where can I get a copy of the *Rail Classic's All Steam Special*?

Arvids Breikss
Tacoma, Wash.

(The Steam Special is still available from our back issue department for \$2.00.—ED.)



Rapid Transit For Big Cities? Yes—But,



In North America, you can find operating rapid transit systems in seven of the United States, two Canadian provinces and Mexico City. Yet *The Third Rail* has readers in 43 states, D.C., Canada and Mexico (not to mention four nations overseas). In fact, the majority of our readership comes from areas that have no rapid transit—yet. The point? They—and we—realize the importance of rapid transit and light rail transit in our society's future . . . in smaller cities and growing communities, as well as in our metropolises. The *Third Rail* keeps an eye on the rapid transit scene, with news coverage and photos, technical articles and analysis (the background behind the news), not to mention the lighter side of transit with historical items and views of the passing scene. Recent issues have included a look at GM's role in the decline of street railways, the first detailed analysis of President Ford's transit record, and an illustrated ride into rapid transit's past.

SUBSCRIPTION BONUS!

Beginning with the new year, *Third Rail* Press will begin offering selected materials from other publishers which we believe *Third Rail* readers will find of special interest. Each selection will be briefly reviewed and orders will be filled by us from stock. Those who enter their subscriptions to *The Third Rail* now will receive a \$1.50 Bonus Coupon along with their first issue of the magazine, which may be used toward the purchase of any item (other than subscriptions) offered by or through *Third Rail* Press (including available back issues of *The Third Rail*) at any time during the next year.

THIRD RAIL PRESS

P.O. BOX 79 • BABYLON, NY 11702

Please enter my subscription to *The Third Rail* for one year (6 issues) beginning with the current issue. I have enclosed:

() \$6.00 (for regular mailing)

() \$7.50 (for first class mailing)

and include my \$1.50 merchandise coupon. Send to:

Name _____

Address _____

Railroad Antiques & Artifacts

Choice pieces from America's leading mail order specialist in diverse non-paper RR & related collector's items. All authentic, museum quality (Smithsonian among repeat customers), wide selection, satisfaction guaranteed. Appraisal service available. Send 3 stamps for current sales lists.

Scott Arden—Noti, OR 97461

COLORADO RAILROAD MAP

Our popular all-time Colorado railroad map reprinted—NOW with 8 rare map reprints on reverse! 3 colors, 24 x 36— \$3 ppd.

Colorado Railroad Museum

DEPT. C, BOX 10, GOLDEN COLO. 80401

Railroad Reproductions in Color

Superbly printed reproductions from the nation's finest railroad photographers.

- **1976 CALENDAR**—13¼"x10¾", 13 photos selected to represent a cross section of North American railroads, steam and diesel. \$4.95 each, plus \$1.50 postage and handling. Overseas add \$2.50. Limited supply.
- **FRAMING PRINTS**—19"x23", printed on high quality paper with special fade resistant inks.
- **PICTURES**—5½"x8¾", printed on heavy card stock, high gloss lacquer coated. Extensively detailed histories. 30¢ each.

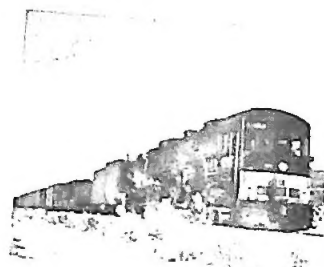
Available in leading hobby shops, bookstores and railroad museums. NEW 1975 catalog with sample pictures—\$1.00. Dealer inquiries invited.

California residents add 6% sales tax.

LYMAN E. COX

P.O. BOX 15902, SACRAMENTO, CA. 95813

SINCE 1944



Vanishing
Vistas®

"WHERE THE ACTION IS"

Who is that guy just above the caboose spoiling this otherwise pleasant scene of Santa Fe's Super-C easing down off of Cajon? Why it's the Editor of course.

Covering the fast paced rail scene today takes teamwork, lots of it, sometimes more than one person can handle, and many times it takes more than one pair of eyes to accurately report the story, so whenever possible RAIL CLASSICS staffers team up to doubly insure we see everything to give you, our readers, the best possible coverage.

This trip we're exploring Cajon Pass, the next might be checking a shortline going through its daily chores, another might be following the abandoned route of a once-mighty narrow-gauge empire, whether it be here in California, Bar Harbor, Maine, Vancouver, British Columbia, Guadalajara, Mexico or beyond to other continents.

Whatever the situation, wherever the action is, we're out there getting the facts and photos to give you the best in railroad journalism. Won't you join us?

2020



Send to:

RAIL CLASSICS SUBSCRIPTION

7950 Deering Ave., Canoga Park, Ca. 91304

Please enter my subscription for RAIL CLASSICS for only \$9.95 for one year (six issues).

Name

Address

City State Zip

RAIL CLASSICS

JANUARY, 1976
VOLUME 5, NUMBER 1

FEATURES

- THROUGH THE RIVER** John Krause 12
The Elk River Coal & Lumber provides a look at days past in logging
- BUILT TO LAST FOREVER** Richard J. Cook 20
That's what the Cleveland Union Terminal was planned for, long ago
- U.P.'S WEST COAST SHORTCUT** Kistler/Schmeling 30
The Gibbon Cutoff sees almost everything UP owns, plus pool power
- THE STREAMLINE STYLE** Robert C. Reed 44
Streamlining swept across America touching almost every railroad
- WORLD'S GREATEST STEAM COUNTRY** Ron Ziel 48
Indonesia is the undisputed leader for steam in the seventies
- WAY OUT WEST** William D. Middleton 56
Our reminiscing photographer visits the west in steam and diesel times
- SLIM GAUGE ELECTRICS** Van Court Wilkins 64
Narrow? Yes. Small? Not necessarily!

DEPARTMENTS

- Rail Mail** 4
- Copy 19** 6
- Rail Photo Clinic** 8
- Books** 10
- What's Happening** 26
- Photo Gallery** 38
- Derail** 82

RAIL CLASSICS is published bimonthly by Challenge Publications, Inc., 7950 Deering Avenue, Canoga Park, California 91304. Copyright ©1976 by Challenge Publications, Inc. All rights reserved. Nothing in whole or in part may be reproduced without written permission of the publisher. Publisher assumes no responsibility for unsolicited material. All photos, artwork, and manuscripts must be accompanied by stamped self-addressed return envelope. Single copies \$2.00. Subscription \$12.00 for 6 issues (one year). Second class postage paid at Canoga Park, California and at additional mailing offices. Printed in U.S.A.

EDITORIAL STAFF

Denis Dunning—Editor
David Lustig—Associate Editor
Ron Ziel—Foreign Steam Editor
Stuart Diaux—Editorial Asst.
Larry Byrd—Layout/Design

CHALLENGE PUBLICATIONS

Edwin A. Schnepf—Publisher
John Ernsdorf—Art Director
Alan Kuda—Advertising Director
Chris Hamm—Advertising Coordinator
Sven Carlson—Marketing Director
Jerry Stanfield—Circulation Director
Robert Ratner—Production Director
Janet Graham—Reader's Service



THIS MONTH'S COVER—Amtrak's "San Diego" exemplifies the streamline era. In this scene just south of Carlsbad, California. For more on this subject turn to page 44. David Lustig photo.

EDITORS MEMO

Two of the nation's newest and theoretically most advanced railroads seem to be in trouble. California's BART has a new man in charge in the hopes that they can try and get back on schedule.

BART is still operating only in the daylight during the week, with no night or Sunday trains to be seen. And the schedules are critically short of the anticipated, with the resultant lack of passengers that had been hoped for. And reading remarks of the new head of BART, you get the feeling that he considers the task rather hopeless, and nothing short of a miracle will make the system even come close to the original promises.



Where BART was designed to haul nothing but passengers, the all electric Black Mesa & Lake Powell was designed to haul only coal, and do it almost totally automatic. We gave a short run-down of some of BM&LP's troubles in the May issue of RAIL CLASSICS, but a story in the August 4th issue of Business Week paints an even drearier picture.

The concrete ties are cracking under the heavy loads, the wheels are wearing out at an alarming rate, and to help ease these problems the specially built hopper cars are only being loaded to three-quarters capacity.

It looks like they will replace much of the expensive concrete tie network with wood, go to normal three-man crews, smaller cars and even an additional train. This will also mean the construction of passing sidings along the mainline that is now single track all the way. The railroad that cost a little over \$50 million to build may require an additional \$20 million to make it work the way the Salt River project needs it.

Even the automatic whistle that was supposed to blow at grade crossings seems to have a mind of its own. Quoting from Business Week "... the whistle was disconnected when it began blowing at beer cans between the rails. In time honored railroad tradition, the BM&LP's crew has given it a nickname: 'Big Mess & Lots of Problems'."

Maybe some of these new railroad designers should have a talk with the people who have been building them for the last century and a half.

SCALE R/C MODELER

An all new magazine for the
scale radio control
enthusiast from
Challenge Publications



SCALE R/C MODELER

is a new concept in the hobby magazine field. Our magazine is devoted to the idea that a model should be just that, a replica of a prototype, be it airplane or boat. We will follow the format that has made other Challenge Publications such as Air Classics and Scale Modeler leaders in their field; big photos and interesting features and technical articles.

Our magazine will include construction articles complete with plans in each and every issue. We will present three views, photographs and technical information on actual prototypes.

Each issue will carry 8-16 pages of editorial color devoted to models and prototypes, markings and paint schemes. Never before has there been a magazine quite like

SCALE R/C MODELER

so don't miss a single issue.
SUBSCRIBE TODAY and save!

SUBSCRIPTION COUPON

CHALLENGE PUBLICATIONS, INC.
7950 DEERING AVENUE
CANOGA PARK, CALIFORNIA 91304

NAME

ADDRESS

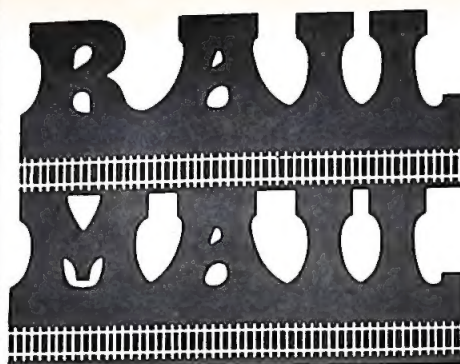
CITY

STATE ZIP

Regular Newsstand Price—\$2.00 Per Copy

1 Year Subscription (6 issues) \$ 9.95

2 Year Subscription (12 issues) \$17.95



Finest Loco Challenged

The July '75 article on the S.P. Daylight locomotive was the highlight of the issue. However, the claim that it was "the finest steam locomotive ever built" is likely to be contested.

S.P. Class GS-5 engines 4458 and 4459 were a better design in that these two were roller bearing equipped on all axles. But then, the S.P. is not even in the running. The crown must go to the Northern Pacific, Santa Fe, New York Central or the Norfolk & Western. The latter's wartime "J" Class minus the later shrouding gets my nod.

Jim Byrne
Bonaire

Netherlands Antilles

Protect Your Film

Picked up the September issue of RC and it is another great. Do have a couple comments though.

In Rail Photo Clinic, you suggest putting the film on the floor of the car to keep it cool. It has been my experience that the floor is an extremely hot place due to the heat of the road coming up and the engine heat flowing under the car plus the exhaust pipe also adding its share of heat. So, DO NOT place film on the floor. Same for equipment. Best bet would be one of those insulated picnic bags. Some are solid walled with nice square corners perfect for film in boxes.

The Amtrak photo contest is a great idea. Guess I'd better go a digging!

Robert Harmen
Pueblo, Colo.

More on SF Zebras

In reading the article on Santa Fe's Zebras I couldn't help smiling at author Berglund's comment on page 55, "All of the 800 class RSD15s originally were zebra striped . . ." Tain't so!

I photographed #829 at Binghamton, New York fresh from the Alco plant in Schenectady as it was moving west on the Erie-Lackawanna.

Most, if not all, of the 800s moved west through Binghamton and if my memory serves me correctly either

#814 or #815 was the last to have the zebra skin.

I'll tell you that when I saw the first of the 800s that I spotted here in the jungle motif I did a real double take—I was stunned! What an animal, it was long snout and all!

J. J. Young, Jr.
Binghamton, N.Y.

Dubuque Heard From

Your article, "Angel's Flight and Other Funiculars," in the May, 1975, *Rail Classics*, says that "there were others in Dubuque . . ."

The Dubuque elevator is alive and well. I rode it last weekend.

Allan C. Williams
Riverdale, Ill.

A Slight Error

I hope that my knee-jerk reaction is prompt enough to put me among the first to call your attention, and Mr. Kenneth Feenstra's attention to the fact that the photo given to him by Mrs. Anna Blanchard, and which you published in the September issue of your "colorful publication" *Rail Classics*, is not a photo of "the maiden voyage of Angel's Flight."

In my own extensive collection of memorabilia, I have a similar shot of a similar group which includes a current resident of Tustin at a very tender age.

Leighton Keeling
Tustin, Calif.

Is someone pulling your leg, or are you pulling ours? Re: Photo in Sept. 1975 issue claiming to be the first run of Angel's Flight. Really!!! Everyone should know that that photo was taken at Echo Mountain on Pacific Electric Railway's fabulous Mount Lowe line, whose Great Incline dwarfed Angel's Flight in every way . . . length, steepness of grade, scenery, altitude, etc.

A commercial photographer took an identical photo as each carload of passengers arrived at Echo Mountain, then developed the photos while the people were up at Alpine Tavern, then he sold prints to the passengers on their return trip.

Chard L. Walker
Hesperia, Calif.

Boobos in Peru

Jack Neville's essay on Peru in the July issue might have been more enjoyable had it not been for a number of obvious errors. Use of the initials "CdeP" in the text is misleading, for this is the reporting abbreviation of the Cerro de Pasco Railway and not the Central of Peru. The latter has traditionally used "FCCP" (see photo

on page 45) or simply "FCC." Even more mystifying is the placing of the Cerro de Pasco herald above the Huancayo-Huancavelica roster.

Perhaps the most serious error concerns the journey over the Central of Peru. Passenger trains on that line reach their maximum altitude inside the Galera tunnel at 15,688 feet. La Cima is located on the freight-only Morococha branch which leaves the mainline at Ticlio and rejoins it before reaching La Oroya. The altitude at La Cima marker is 15,806 feet, with an industrial spur rising even higher to 15,844 feet. That makes the Central of Peru the world's highest railroad of any gauge, having gained that title by default when a meter gauge branch line in Chile was abandoned a number of years ago. Honors for the world's highest mainline and for the highest passenger station still have to go to the Bolivian National Railway's Rio-Mulato-Potosi line at El Condor, 15,705 feet. Finally, the silver F.C.H.H. railcars are I believe built by the English firm of Wickim, not Fiat.

On a more positive note, I can report that the F.C.H.H. as of June 1975 is still very much in steam, with the new diesels apparently going to the tourist hauling F. C. Cuzco-Santa Ana. One big change that has taken place has been the nationalization of the formerly privately owned lines, including the Central of Peru and the Cerro de Pasco, and their consolidation along with the state owned narrow gauge lines to form ENAFER (Empresa Nacional de Ferrocarriles). Eventually all locomotives and rolling stock will likely carry such identification.

John A. Kirchner
Chicago, Ill.

Steam Still Active

I enjoyed Klaus Schmidt's article about West German steam in the November 1974 issue of *RC*. I had a chance to experience this recently. I visited the terminal at Lehrte and found twenty-six 2-10-0s stationed there, with twelve under steam, twelve getting heavy repairs and only two on the dead line.

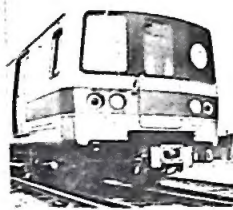
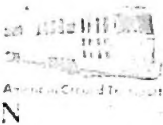
Also thought I'd let you know that Steam, Inc., a non-profit organization, is rebuilding a Northern Pacific Class S-4 4-6-0 up in Tacoma, Wash.

And finally, where can I get a copy of the *Rail Classic's All Steam Special*?

Arvids Breikss
Tacoma, Wash.

(The *Steam Special* is still available from our back issue department for \$2.00.—ED.)

Rapid Transit For Big Cities? Yes—But,



In North America, you can find operating rapid transit systems in seven of the United States, two Canadian provinces and Mexico City. Yet *The Third Rail* has readers in 43 states, D.C., Canada and Mexico (not to mention four nations overseas). In fact, the majority of our readership comes from areas that have no rapid transit—yet. The point? They—and we—realize the importance of rapid transit and light rail transit in our society's future... in smaller cities and growing communities, as well as in our metropolises. The *Third Rail* keeps an eye on the rapid transit scene, with news coverage and photos, technical articles and analysis (the background behind the news), not to mention the lighter side of transit with historical items and views of the passing scene. Recent issues have included a look at GM's role in the decline of street railways, the first detailed analysis of President Ford's transit record, and an illustrated ride into rapid transit's past.

SUBSCRIPTION BONUS!

Beginning with the new year, *Third Rail Press* will begin offering selected materials from other publishers which we believe *Third Rail* readers will find of special interest. Each selection will be briefly reviewed and orders will be filled by us from stock. Those who enter their subscriptions to *The Third Rail* now will receive a \$1.50 Bonus Coupon along with their first issue of the magazine, which may be used toward the purchase of any item (other than subscriptions) offered by or through *Third Rail Press* (including available back issues of *The Third Rail*) at any time during the next year.

THIRD RAIL PRESS

P.O. BOX 79 • BABYLON, NY 11702

Please enter my subscription to *The Third Rail* for one year (6 issues) beginning with the current issue. I have enclosed:

() \$6.00 (for regular mailing)

() \$7.50 (for first class mailing)

and include my \$1.50 merchandise coupon. Send to:

Name _____

Address _____

Railroad Antiques & Artifacts

Choice pieces from America's leading mail order specialist in diverse non-paper RR & related collector's items. All authentic, museum quality (Smithsonian among repeat customers), wide selection, satisfaction guaranteed. Appraisal service available. Send 3 stamps for current sales lists.

Scott Arden—Noli, OR 97461

COLORADO RAILROAD MAP

Our popular all-time Colorado railroad map reprinted—NOW with 8 rare map reprints on reverse! 3 colors, 24 x 36—\$3 ppd.

Colorado Railroad Museum

DEPT. C, BOX 10, GOLDEN COLO. 80401

Railroad Reproductions in Color

Superbly printed reproductions from the nation's finest railroad photographers.

- 1976 CALENDAR—13¼"x10¼", 13 photos selected to represent a cross section of North American railroads, steam and diesel. \$4.95 each, plus \$1.50 postage and handling. Overseas add \$2.50. Limited supply.
- FRAMING PRINTS—19"x23", printed on high quality paper with special fade resistant inks.
- PICTURES—5½"x8¼", printed on heavy card stock, high gloss lacquer coated. Extensively detailed histories. 30¢ each.

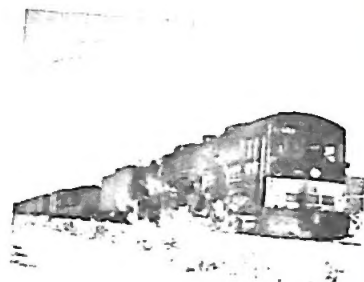
Available in leading hobby shops, bookstores and railroad museums. NEW 1975 catalog with sample pictures—\$1.00. Dealer inquiries invited.

California residents add 6% sales tax.

LYMAN E. COX

P.O. BOX 15902, SACRAMENTO, CA. 95813

SINCE 1944



Vanishing
Vistas®

COPY 19

By David Lustig

Many of the letters we receive here at 7950 Deering are questions about what we need or want from readers concerning photo and/or story contributions to *Rail Classics*. We're always glad to hear from you but sometimes we get a little backlogged, so let's explain a few of our needs and ground rules.

We love receiving outside material. It's always refreshing to come across an unusual photo, perhaps of the same old subject but with a new twist, or maybe an interesting shot of a little covered area. Same thing for stories. It's our readers that have the ability to provide the local color and flavor as well as knowing where to look for the right information concerning their favorite subject.

But, and it's a big but, the material has to be thoroughly researched, some of the photos in a story have to be action shots and color has to be transparencies. No color prints, ever, so save your money.

"What's Happening" is a good place for many new contributors to get a break. Photos, if possible, should tell a story. If the Bangor and Aroostook, for example, leases Union Pacific power, a scene showing both roads' units, or UP diesels passing a BAR station says a lot more than just a close-up shot that could have been taken anywhere.

Make sure your name and address are on the manuscript and each photo you send. It's important to assure proper credit and more important, payment for material we use. Return postage is a must if you want rejected material returned. Lack of suitable postage will result in the material being filed or, if we feel it's technically unsuitable for reproduction, trash-canned.

Rejections unfortunately, have to be made, and made they are. The weeding out process is necessarily critical and highly selective. Content, relevance and overall accuracy are important factors in judging a story as well as composition, impact and technical quality for photos and transparencies. Whether the contributor is a regular or newcomer, all material gets the same consideration.

Photos preferably, should be 8 x 10 glossies, but we have no qualms if the shot of a 4-6-0 you found in an old trunk is a 4 x 5. Slides of any size are fine, except 110 and 126. With rare exceptions, the overall quality of these latter two are just not good enough for magazine reproduction.

With all these restrictions, don't get discouraged. Besides, if you don't send in that photo or story, you'll never know



if it's what we're looking for, now will you?

...

Looks like another steamer will be helping celebrate the Bicentennial.

The Steam Locomotive #39 Preservation Fund has been set up to restore Long Island 4-6-0 #39 back to operating condition and run her on the road by May 1st of next year.

For additional information, contact the Fund at #39 Montauk Hiway, Bridgehampton, N.Y. 11932. By the way, our Foreign Steam Editor, Ron Ziel is the president, and he'll be in charge of the rebuilding.

...

How the stereotype remains . . . a West Coast electronics firm has been running radio commercials on the equip-

ment it has sold a large transcontinental railroad. As the narrator makes his pitch on all the modern advances his company has done for the line, what's in the background? Why the sounds of a steam locomotive of course!

...

One last item . . . according to Luke R. Sinclair of the Boone County Historical Society, an effort is under way to raise funds for a Kate Shelley Memorial Park and Railroad Museum to be located in Moingona, Iowa and eventually include a small depot, baggage car and various railroad historical artifacts. For a one dollar contribution they are offering a reprint of the July 13, 1881 issue of the Boone County *Democrat* which contained a full account of Ms. Shelley's heroic trek across the Des Moines River bridge to warn of a washed out bridge.

RAIL CLASSICS BINDERS

Now you can permanently protect each issue of Rail Classics. Beautiful art leather binders, imprinted in gold holds 12 issues. Each magazine can be inserted or removed separately. Only \$4.95 each.



**\$4.95 FOR ONE
\$9.50 FOR TWO
WE PAY
THE POSTAGE**
(Calif. Residents add
6% sales tax)



BACK ISSUES AVAILABLE

FILL IN YOUR COLLECTION WHILE THE SELECTION IS STILL GOOD. . . .

Vol. 3, No. 2 May '74
East of the Cane
Haulers; Feather
River RR; Cumbres &
Soltec; Amtrak's
French Turbos;
Hollywood and the
DP&E; Railroading
in Vietnam.

Vol. 3, No. 3 Aug. '74
Wichita Northwest-
ern; Esquimalt &
Wanaimo in Canada;
Amtrak's San Diegan;
The Krausse Maffei
Invasion; Boston &
Maine's Bluebirds;
Kingston Flyer;
Sugar Pine Railway
Revival.

Vol. 3, No. 4 Nov. '74
El Paso's PCC Line;
Santa Fe in
Nebraska; Union
Pacific's Power
Valley; Northwestern
Oklahoma RR;
Trains of Amtrak;
Salt Flat Railroading;
German Steam.

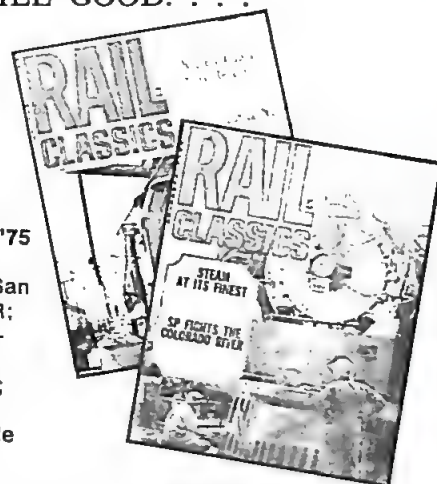
Vol. 4, No. 1 Jan. '75
Southern Pacific vs.
the Sea; Lake Erie,
Franklin & Clarion;
Train Travel in China;
Saltair Route; 8444
at Expo '74; Looking
at Illinois Terminal
Traction; Glories of
Steam;

Vol. 4, No. 2 Mar. '75
Canadian Logging;
Milwaukee Road's
Varsity; EMD's
Mighty Speedsters;
Nevada Northern
RR; Railroad Post-
cards; Limestone
Railroading in Steam
& Electric;

Vol. 4, No. 3, May '75
Angel's Flight; East
Broad Tops Winter
Spectacular; Ha-
waii's only Railroad;
Canadian Alco Cabs;
Gateway to the
Water; Black Mesa &
Lake Powell; State
of the Art Car.

Vol. 4, No. 4, July '75
Middleton's Eastern
Photos; San Fran-
cisco's Key System;
American FT #4449;
Argentina Railroading;
Truman Locos
of Poland; Pennsy's
Fabulous 4-8-2s.

Vol. 4, No. 5 Sept. '75
John Krause on
Steam; The LRC; San
Manual Arizona RR;
C-14, South Ameri-
ca's Rail Spine;
Santa Fe's Zebras;
Illinois Terminals
Streamliners; Battle
for Stevens Pass.



RAIL CLASSICS BACK ISSUES

- Please ship the following back issues at \$1.25 each.
- Cash, check, money order enclosed for \$.....

● **ATTN: READER'S SERVICE RAIL CLASSICS**
● **7950 DEERING AVE., CANOGA PARK, CA. 91304**

● **NAME** _____

● **ADDRESS** _____

● **CITY** _____ **STATE** _____ **ZIP** _____

ALLOW SIX WEEKS FOR DELIVERY

RAIL PHOTO CLINIC

By Ernest H. Robl

Railroads are a combination of people, technology, and that intangible thing best described as atmosphere. If you've done your homework, the chances of your photos doing justice to each of these elements are much better.

Among the things that lend character to a particular railroad are such diverse and seemingly insignificant things as switchstands, whistle posts and section sheds. A road will usually have its own particular style for each of these, and their inclusion in the foreground or background can provide as distinctive an identification of a railroad or an area as a signature for a person.

Keeping an eye out for such details will considerably improve the atmosphere content of your pictures. If you're already shooting pictures of motive power, it usually takes only a little bit of extra effort to include these trackside features. Often they'll even provide a "framing" effect that considerably enhances a picture.

If you're really looking for balanced photo coverage of a railroad or an area, don't forget the people. Railroads can't run without them. Maybe the human element has been what's been missing from your pictures.

Do you know something else that may be missing?

Maybe an example will show you: Let's say you have a picture of a battered switcher shoving some cars past a switchstand. If it is a technically well composed photo, it may hold your attention for a few moments.

It'll hold your attention much longer, however, if you know that the switcher, this railroad's first diesel, is just passing the switchstand marking the spot where, on a foggy night a dozen years ago, it crashed into the back of a stalled freight, and that some of those scars visible on the engine date back to that incident.

The picture itself hasn't changed, but the information with it has. There's an old saying in the news business that a picture may be worth 10,000 words—but a picture with 10 words may be worth 100,000 words.

In the case of published photos, we're talking about caption information. Even if you're not interested in getting your work published, however, just showing it to fellow fans, the words that go with the picture can be just as important.

The best way to start accumulating this information, is to read everything available about the railroad you're photographing—before you start photographing. Then, while you're out trudging along the tracks, jot down a few notes on what you're getting on film.

Sure, you know then just what you've aimed your camera at—but will your memory be as good a year from now, maybe a hundred or a thousand photos later?

The time—the date—when a picture was taken can be just as important as any of the other elements of the picture.

A low-nosed Norfolk Southern geep in a grey and red paint scheme switching at Raleigh, North Carolina in 1973 wasn't anything unusual. The same

scene in the late summer of 1974 was quite a bit rarer—with NS having been taken over by Southern at the beginning of the year and Southern's program of repainting and adding high noses to NS power well under way.

That a picture of the last run on the now torn-up branch is more valuable than others taken a few days earlier is probably self-evident.

Often, however you may not realize that a particular photo is valuable—to you or someone else—until quite some time later.

As a minimum, if you're really interested in protecting the investment of time, effort and money you've put into your photos, the boxes you store your slides in or the envelopes holding your black and white negatives should be labeled with the date, the location and a brief description of what's happening in the photos.

This may include the type of diesel or other rolling stock, because spotting features that were quite evident while you were crunching through the ballast at the yard may not be so obvious later in any given picture. In these days of look-alike diesel models, one of the surest ways of finding out just what you have on film is to glance at the builder's plate, if you can get close enough to do that.

Then write that information down. If you're too lazy to write it down, a frame of film will do the job.

If you're shooting a lot of film, take a tip from the movie-makers and "slate" your film. Carry a small black-board in your car, and it takes only a matter of seconds to get any desired information on the film itself.



What was normal yesterday may be rare today. Perfect example is this shot of three low-nosed Norfolk Southern diesels photographed early last year by Curt Tillotson, Jr. Today? Well the railroad is gone, now part of the Southern and the diesels have had their short low noses made high and wear black paint.

THE UNOFFICIAL GUIDE TO RAILROADS OF CALIFORNIA

The Where-To of California Railroading

THE Book for rail enthusiasts, the Unofficial Guide tells you where the railroads are, where some of the better spots are and exactly how to get there. Over 100 pages of information, maps, terminals and yards, shortline rosters.

**THE ONLY PUBLICATION OF ITS KIND
SAVE TIME AND GAS FOR YOU**

\$5.00 (soft cover)

(Enclose 50¢ for postage; Calif. residents add 6% sales tax). Allow five weeks for delivery.

WestPost

18881 Dylan St. Northridge, Calif. 91324



BUCKLES

for wearin',
treasurin', collectin'

A FRESH BUCKLE \$5*

PENN CENTRAL
SOUTHERN PACIFIC
WABASH
ATLANTIC COAST LINE
ERIE
SANTA FE
NEW YORK CENTRAL
THE SOUTHERN
UNION & CENTRAL PACIFIC
ROCK ISLAND
BURLINGTON ROUTE

GRAND TRUNK
UNION PACIFIC
SOO LINE
CHICAGO &
NORTHWESTERN
MILWAUKEE ROAD
FRISCO
NORTHERN PACIFIC
RIO GRANDE
B & O
CNR

Genuine Leather Belts: \$5* 1 3/4" wide, with loop & snaps even sizes only 30" thru 44". Specify black, brown or white. Please enclose check or money order along with NAME, ADDRESS, and ZIP CODE. Make sure to specify TYPE of BUCKLE &/or BELT SIZE and COLOUR. Send \$1.00 for illustrated brochure and itemized listing of over 300 designs available.

LEGENDARY BUCKLES
P.O. BOX 891, DEPT. RC
ARL. HTS., ILL. 60006

*Please add 50c each item
postage and handling
Satisfaction guaranteed.

WESTSIDE'S ALMANAC



WESTSIDE MODEL COMPANY

THE
"BRASS HANDBOOK"
PAST, PRESENT, FUTURE

AT YOUR LOCAL HOBBY DEALER

**WESTSIDE
MODEL
COMPANY**



1801 DALEHURST
LOS ALTOS, CALIFORNIA 94022

RAILROAD BOOKS

The South Park Line, A Concise History, published by the Colorado Railroad Museum, Box 10, Golden, CO 80401. 280 pages, 8½" x 11", \$14.75.

This is No. 12 in the Museum's series of Colorado Rail Annuals, and the finest in our opinion. Though much has been written about the fabled South Park Line, otherwise known as the Denver, South Park & Pacific, this work brings much new information to the reader along with an excellent selection of photographs. Rather than sticking to nothing but dreary statistics and dates as has become the fashion with many railroad books, the authors tell an interesting story using many first hand accounts of the happenings in the history of the line. And not content just to present the South Park's ancient history, they include a great deal of material on the Colorado & Southern as well as the interim owners of the railroad. This is a well-written book that should be in any western or narrow gauge railroad library. D.D.

Passenger Train Annual published by PTJ Publishing Co., 29 East Broad St., Hopewell, NJ 08525. 64 pages, 10¾" x 8½", \$7.95.

This is a softcover picture book from the publishers of "Passenger Train Journal," a quarterly magazine devoted to present day passenger travel. Included are some fine photos of both pre- and post-Amtrak trains, with some in color. The captions are brief at best, but the selection does give a good overall look at modern passenger service. S.D.

Napa Valley Route by Ira L. Swett and Harry C. Aitken, Jr. Published by Interurbans, Box 201, Claremont, CA 91711. 576 pages, 8½" x 11", \$24.50.

This is the last book written by Ira Swett before his death and one that should find a great following

U. P. FANS



UNION PACIFIC STEAM

Eastern District

A consolidation of previously published books, all under one cover. By James L. Ehernberger and Francis G. Gschwind. Includes *SMOKE ACROSS THE PRAIRIE* (Nebr. Div.) *SMOKE OVER THE DIVIDE* (Wyo. Div.) and *SMOKE ABOVE THE PLAINS* (Kans. Div.)

Over 300 photos by well-known photographers, descriptive text of each line operated by the U.P. the last 25 years of the steam era. Hardbound, 200 numbered pages, 8½ x 11 high quality book stock, indexed..... \$15.95

Also available **SHERMAN HILL** Steam and Diesel, 8½ x 11 hardbound book, 128 pages, indexed on quality book stock. \$10.95

**ALL ORDERS SHIPPED POSTPAID
IN USA AND CANADA**
(Nebraska residents add 2½% state sales tax)

E. & G. PUBLICATIONS
BOX 101, Dept. RC, Callaway, Nebr. 68825

SUGAR TRAMP



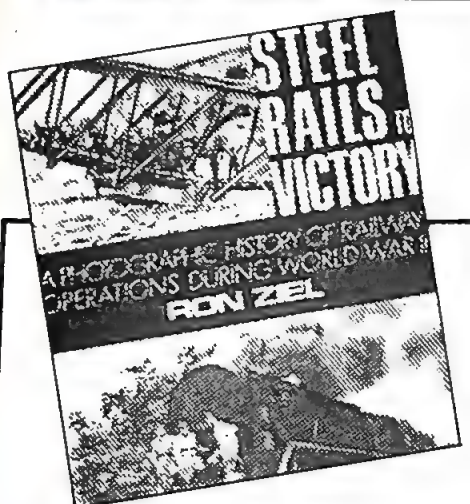
Colorado's
Great Western Railway
By Gary Morgan

The first complete history of Colorado's most famous s.g. shortline — the Great Western — just in time for Christmas! A great gift ... for yourself or a friend! Special limited edition of 1,500 copies, signed and numbered with timetable reprint and four beautifully lithographed prints just \$14.95, postpaid. From America's newest publisher of Colorado history. Regular edition \$12.95.

8½" x 11"

Over 100 Rare Photos!
From your dealer or order direct

Centennial Publications
1400 Ash Drive
Ft. Collins, Colorado 80521



STEEL RAILS TO VICTORY: By Ron Ziel, this is the finest book ever published on the railroad operations of WW II throughout the world. Rare and historic photos with a well written text. 288 pages. \$14.95

STUDIO

Box 631, Sierra Madre, Ca 91024

Please ship the following:

_____ STEEL RAILS TO VICTORY.

Name

Address

City State Zip

among those who cherish electric railways. The Napa Valley Route was a short (41 miles) electric line running from Vallejo on the north end of San Francisco Bay through the Napa Valley to Calistoga. There is virtually nothing that happened to the railroad that is not covered in this book. Included are photos, maps, timetables and hundreds of other bits and pieces. The photos are good for the most part and chronicle the story well. Our only objection is the use of a typewriter for the text. Using regular typesetting would create a much nicer work and probably save the publisher considerable time and money in the printing costs, as the book could be easily shortened by 150 pages. It is time for the new owners of Interurban Publishing to say goodbye to the IBM typewriter and join the ranks of the class publishers. S.D.

The Streamline Era by Robert C. Reed, published by Golden West Books, P.O. Box 8136, San Marino, CA 91108, 9" x 11½", 300 pages, \$24.95.

This massive 300-page tome might very well be subtitled, "All you ever wanted to know about streamlining in text and photos," it's that good.

Between the covers lie fifteen chapters covering every conceivable angle of streamlining, mostly pertaining to trains and railroading but also, to a lesser extent, airplanes, automobiles and everything and anything else that was touched by the designer's pen.

Early attempts, successes and failures—beautiful and hideous are all covered. The Zephyr is there, along with the Hiawathas, Royal Blue, Green Diamond, the entire Santa Fe fleet, New York Central's various streamlining attempts, New Haven, Rock Island, Southern Pacific, etc., etc. Photos and just as important, reasons why certain streamlining was done in certain ways. One entire chapter is devoted to foreign works.

Chrysler Airflows, Sharknose diesels, Aerotrain, domes, bi-levels, Turbo, metroliners, Lockheed Constellations, name it, anything you can possibly think of and you'll find it sooner or later in **The Streamline Era**.

Golden West has done an excellent publishing job, on heavy stock with an interesting dust jacket by Howard Fogg. This book will be an excellent addition to any railroad library as well as provide many hours of pleasurable and informative reading. D.C.L.

(Continued on page 81)

DIESEL LOVERS ARISE!!

THE EDITORS OF RAIL CLASSICS BRING YOU A FANTASTIC
COLLECTION OF DIESEL PHOTOS AND STORIES IN



READY NOW!
**ONLY \$3.00 AT NEWSSTANDS,
HOBBY SHOPS OR DIRECT.**

132 pages packed with the finest diesel material you can imagine. Santa Fe's climb into California; Canadian freight and passenger service; Western Pacific motive power; Southern Pacific's Krauss-Maffei and Switchers; the famed Trona Railway Diesels of E-L, L&N, SP&S, GM&O; plus many other features. And as a bonus, 24 pages of color.

Rail Classics 7950 Deering Ave. Canoga Park, CA 91304

Please ship _____ copies of RAIL CLASSICS "Diesel Extra."

Enclosed is ☐ Cash ☐ Check ☐ M.O. for \$_____

Name _____

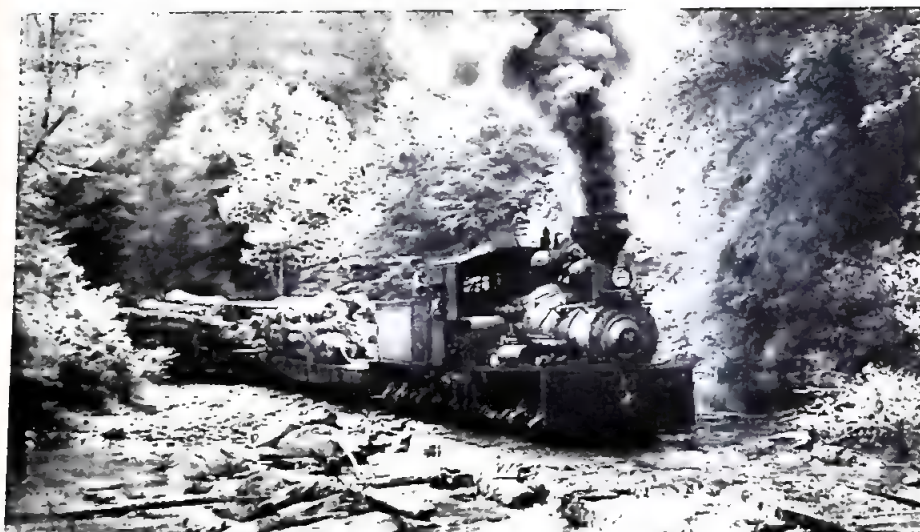
Address _____

City _____ State _____ Zip _____

THROUGH THE RIVER... AND THROUGH THE WOODS

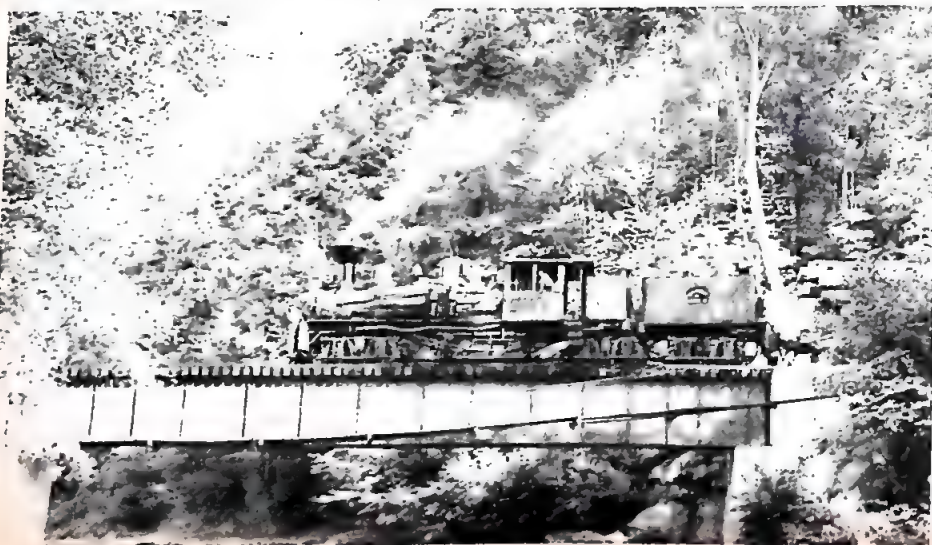
... and into history chugged the
Elk River Coal & Lumber Company.

**COMMENTARY/PHOTOGRAPHY
JOHN KRAUSE**



*Shay #12 slobes through Lilly Fork for the last time.
The next day the fires would be dropped forever and Shay #19
would take over until the end of the Elk River operations.*

*Heading out of the woods, Shay #19, now owned
by W. M. Ritter, heads out onto the Buffalo Creek & Gauley
'Y' near Dundon and starts her trip to Swandale.*





For those searching for logging railroading in the east in the late 1950s, there was only one place to go . . . West Virginia. The Mower Lumber Co. at Cass was still sending Shays up the mountains for logs; over at Rainelle, the Meadow River Lumber Co. kept Shays and Heislars at work until late 1956 when diesels finally took over the task; and one other line remained at work in this area of the backwoods near Swandale, West Virginia.

Here the Elk River Coal & Lumber Co. operated the mill and an extensive logging railroad back into the woods up Lilly Fork of the Buffalo Creek. Swandale was located some 13 miles off the "hard top" and being more or less hard to locate was not as well known as the other lines in the area.

To reach the logging lines "up Lilly" it was necessary for the Elk River to use the mainline of the Buffalo Creek & Gauley, or more specifically, that portion of it that included the wye near Dundon. From this point the Elk River steel headed up Lilly Fork to wherever the operations were at the moment.

The Elk River did not build bridges but instead laid rails right on the creek bottom. A stranger riding the train for the first time often felt he was on a boat rather than a train when the water would splash up onto the flat cars.

There were two types of trains operated over the line. The regular log train was pulled by a Shay, working out of Swandale. Before its departure



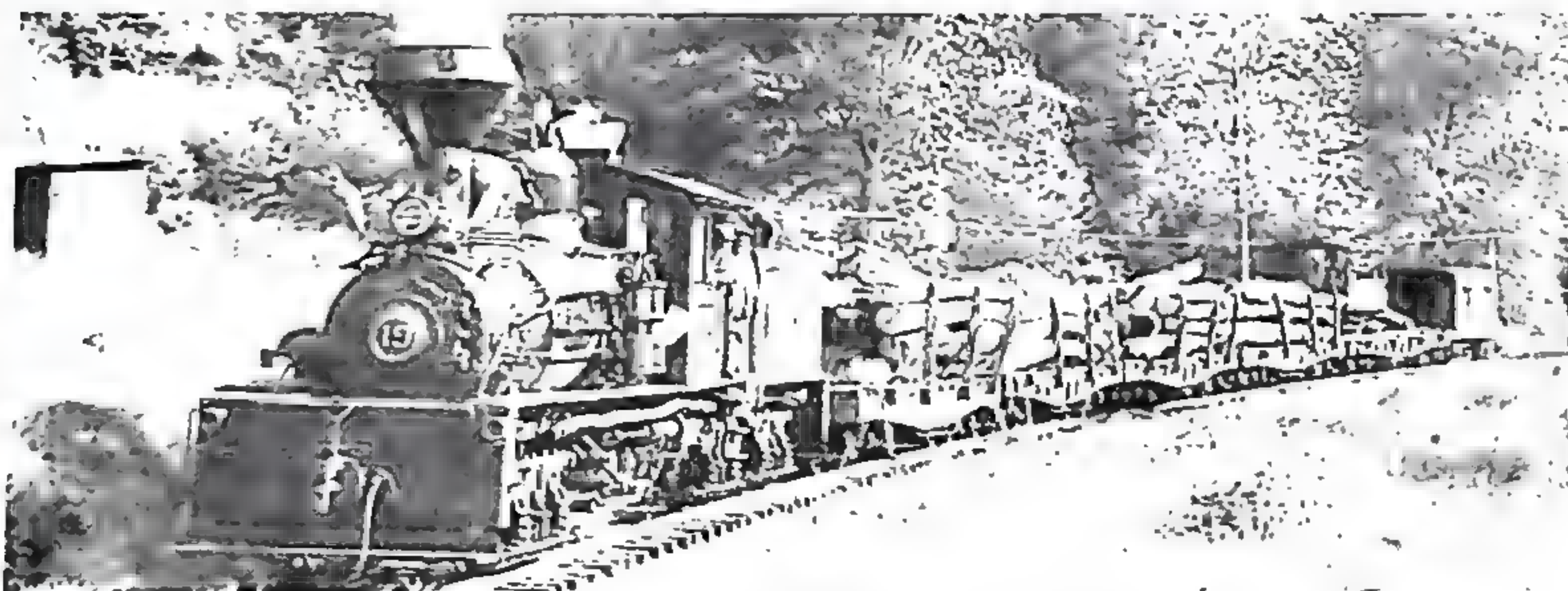
Passing the general store in Swandale,
 Buffalo Creek & Grand Valley
 drink and then

All dressed up and ready for work for her new owners,
 Shay #19 leads the log train on the first day of the new job.
 While the engineer lays a bit of smoke for the
 photographer, the log loader is busy at the rear of
 the train, loading the cars.



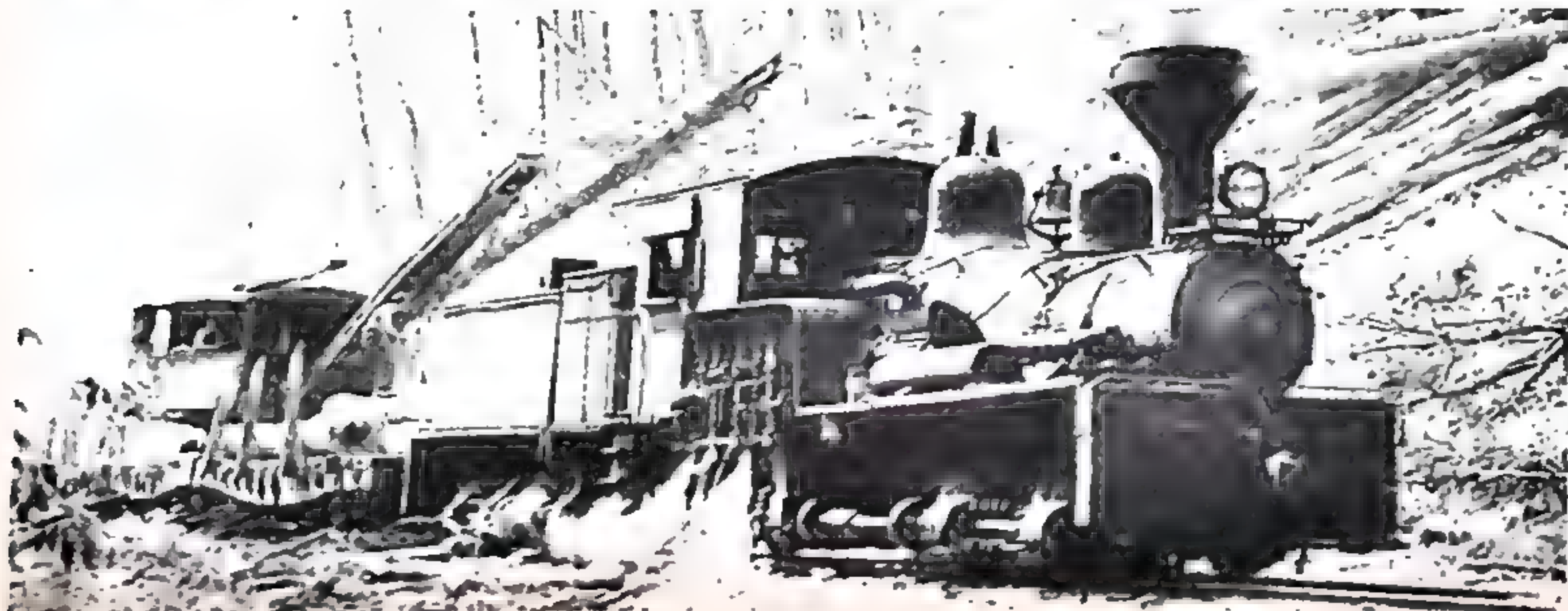
Cherry Creek Boom & Lumber Co. Shay #2 sits in the BC&G
 Swanton yard after arriving from Richwood. She
 started on the Cherry River in 1946, and came to the
 Milk River via Ely-Thomas Lumber in Fenwick. The
 shop crews would soon turn her into Shay #19.

The tracks had to go to the lumber, and this was the job of the steel train. After a rather mild attempt at building roadbed, the log ties are laid in place and then the rails spiked down. But don't laugh . . . it did the



A look at the "other side" of Elk River's #19 when she was bright and shiny. With white flags flying, she is on the BC&G mainline arriving in Swandale with a loaded train, log loader and tiny bobber bringing up the rear.

The log loader was once powered by steam, but by this time internal combustion apparatus was the key to loading fallen timber onto the Elk River cars. The time is summer of 1957 and the location is some distance up Lilly Fork.

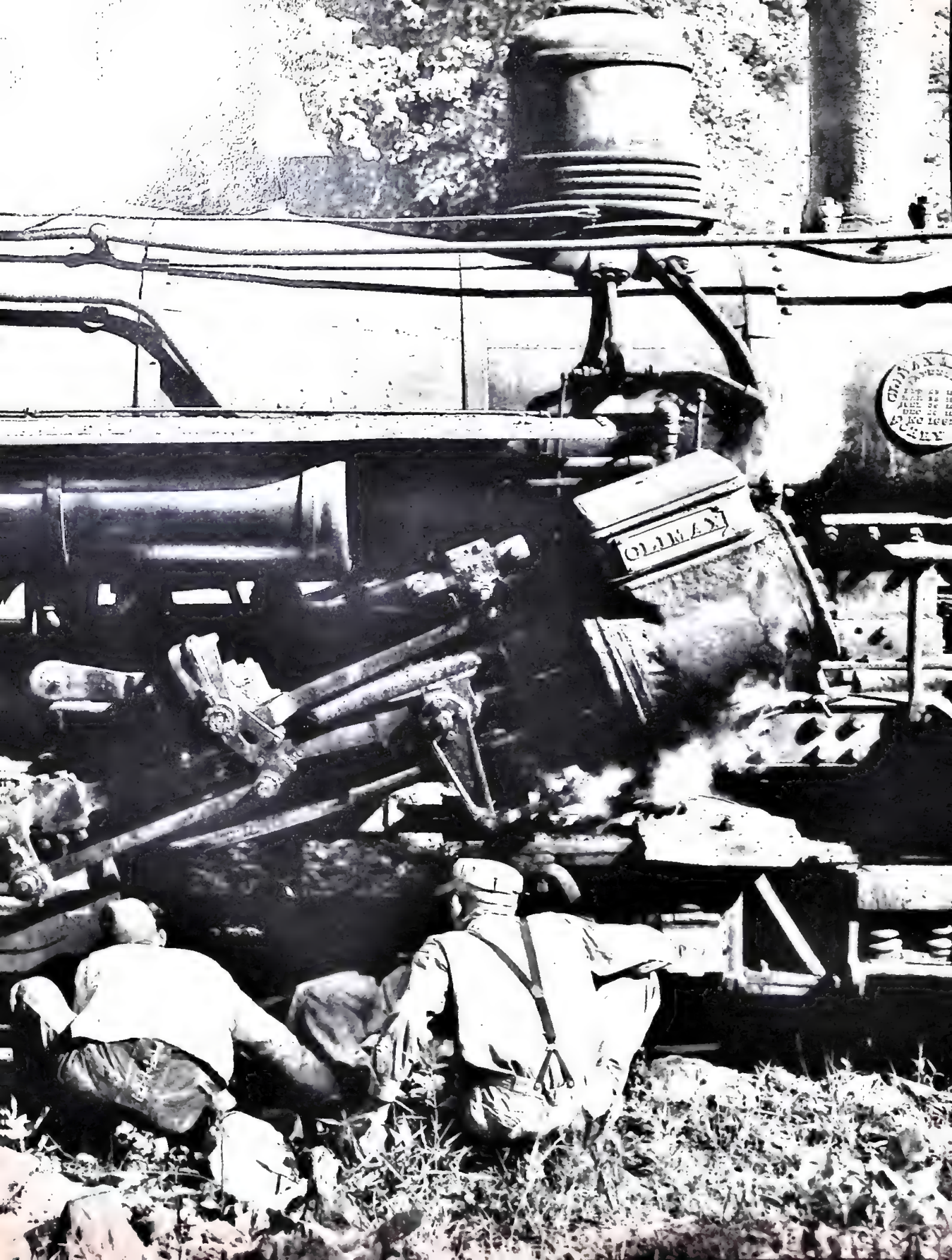


however, the steel rail with a Climax on the head end would leave for the woods. This train was used for laying the constantly changing sidings that served the cutting area that was currently being worked. The steel train operated from Camp One which was located a mile or so up the track from the BC&G wye at Dundon.

As there were no roads or even Jeep trails for much of the run up Lilly Fork the visiting photographer had no choice but to ride one of the trains, loading himself and necessary equipment onto the train at Camp One.

By 1956 when I first visited the Elk River most of the Class 1 railroads had gone to diesels leaving lines like this the only steam holdouts. One could not help but be impressed with the world of steam on the Buffalo Creek & Gauley and the Elk River Coal & Lumber Co. This combined mainline steam operation, the logging operations and the mine operation at Widen. The rail photographer had enough to keep him busy for endless days.

Hearing a noise that shouldn't have been, investigation revealed that the ash pan was falling off. A few minutes of 'field work' and the Climax was once again on her way.





Near Dundon on the BC&G was a 'Y' for turning their 2-8-0. The tail of the wye ended on a bridge and here the lumber line up Lilly Fork began. When the log train arrived back from the woods it would wait here for clearance to enter the common carrier's main. This day the BC&G was late and the log crew took a much needed rest.

Climax #3 has worked the day on the steel train and made a stop for water in the middle of Lilly Fork. The siphon is on and what is unusual for the photographer is just another day to the crew.

DISPOSITION OF LOCOMOTIVES

- #2, Climax: Scrapped.
- #3, Climax: Now in use on the Carroll Park and Western RR at Bloomsburg, Penn. Converted to 4' gauge.
- #19, Shay: On display on the Dry Gulch Junction RR at Wytheville, Virginia.
- #12, Shay: Scrapped.

A special event took place on the Elk River in 1958 when Shay #19 was put into service as a media event for #12, which had come out from the constant trouble of the Coopers.

A check with Mike Koch's "The Shay Locomotive" reveals that #19 had been built by Lima as Cherry River Bourn. & Lumber #2 and had come to Swandale via the Ely-Thomas Lumber Company at Fenwick. She had started her work on the Cherry River in 1946 and went to Fenwick in 1955 but was never put into service there.

In the late fifties W. M. Ritter Lumber Company took over the Elk River and in 1961 this was purchased by Georgia-Pacific Lumber who continued to operate Shay #19 until the end.

Near the finale of operations thousands of fans "discovered" the twisting rail line up Lilly Fork and even had the good fortune to enjoy a few special fan trips along the railroad. Today the railroad and the mill is gone and nature has once again reclaimed the land up Lilly Fork. And its companion, the Buffalo Creek and Gauley, along with the mine locomotives at Widen, is nothing but a memory. They live now only in photos and the memory of those of us that had the luck to be on hand to view the last of the big time logging in the east.



Climax #2 had been supplying parts to keep #3 alive and well, and by 1957 she was about ready for the junk dealer.

At times the Elk River would use the Buffalo Creek & Gauley's mainline for loading logs. Here, in 1957, such an operation is taking place between Dundon and Swandale.





There aren't too many people around Cleveland, Ohio, who give much thought to railroads these days except when they are waiting for a freight train to come by. It's probably only natural because most of them haven't ridden a passenger train from Cleveland in a long time. The reason, of course, is that except for a short commuter run, there are no passenger trains.

It seems strange that Cleveland has been left high and dry with no train service because Cleveland, the largest city in the United States to be without, once built a most impressive monument to rail transportation, which helped make it a rail geographical and financial center. The trains are gone; the monument still stands.

The millions of people who passed through Cleveland's new station used the facilities of one of the finest railroad terminals in the world. They not

only took advantage of the modern terminal facilities themselves but were also pleased to have one of the finest groups of downtown business buildings, a first class hotel and a modern department store within easy walking distance, all connected by underground passageways.

Cleveland's imposing and efficient station came about as a result of a dream, a desperate need, and plenty of financial wizardry on the part of two publicity-shy brothers.

The Van Sweringen brothers, Oris P. and Mantis J., had vision and determination. They knew what they wanted and they went right out to get it. They brought railroad passenger trains to the heart of Cleveland, the Public Square. They built a skyscraper, the 708-foot Terminal Tower, forming the nucleus of a new cluster of office buildings, retail stores, a hotel, and a new main post office building.

The city gained a new skyline. The Terminal Tower became the symbol of Cleveland, a must-see attraction for visitors in town.

The Cleveland Union Terminal (CUT) was more than a downtown structure however. It was also a new double-track railroad operating over the improved rights-of-way of the New York Central and the Nickel Plate. It was electrified (3000 volts) and had 22 impressive 80-foot electric locomotives especially built to haul passenger trains 17 miles from one end of town to the other. It was a model system of its time, in fact, ahead of its time.

A railroad station nearer the heart of town had been talked about in Cleveland for years. The old Union Depot on the lakefront, built in 1866, was outmoded by the turn of the century. It served the Lake Shore & Michigan Southern, the Big Four (CCC&STL) and the Pennsylvania. The Nickel Plate,



Train #43 at milepost 6 on Cleveland's east side, at East 79th Street, taken from the Pennsylvania Railroad overpass.

The Prairie State, Cleveland-Chicago train #73, sets off across the Cuyahoga River Valley on its evening trip with the Tower in the background. Rapid transit tracks now occupy the near side of the bridge.



BUILT TO LAST FOREVER

That's exactly what Cleveland Union Terminal was planned for when *the* way to travel was by flanged wheel.

By Richard J. Cook Photographs by author except as noted.

Erie, B&O and the Wheeling & Lake Erie each had its separate station. Union Depot was dingy, smoky, dim and out of the way. The city had grown away from it.

There was much talk about the need but no unity of action. That Cleveland finally did get a new terminal was due to the tenacity of the Van Sweringen brothers. Back in the gilded '20s these extraordinary men were well on their way with their new Shaker Heights real estate development. They had large holdings in an old Shaker settlement situated on a plateau south-east of the city. They were developing a fine residential area, a bedroom community for the city which lay several miles west and 200 feet lower.

Then, as now, traffic and transportation were major problems. If the Vans were going to sell property to

the upper income brackets, they well knew they must provide some means of getting people to and from downtown. Their answer to this was the construction of an interurban line in 1912.

When they couldn't come to terms with the Nickel Plate Railroad, which wanted too much money for the crossing rights for their rapid transit, the Vans decided on a bold and sensational stroke which caused Wall Street to gasp. They bought up the controlling stock of the Nickel Plate from the New York Central on July 6, 1916.

Suddenly they became railroad owners. Now they had their crossing. But they also had a sick and run-down railway. For \$8½ million they were in charge of 513 miles of railroad system. But the brothers never accepted this as a liability. Actually, it fit right

into their grand plan for remaking Cleveland.

They plunged full force into the road business with the purchase of the Lake Erie & Western and filed application with the Interstate Commerce Commission to consolidate the Nickel Plate, Pere Marquette, Chesapeake and Ohio and Erie into a \$1½ billion package.

Hence the Vans were in the market for a terminal and a place to build it, and where else but the Public Square. The opposition was intense and instantaneous. Everyone knew that the only logical place was at the foot of East Ninth Street. But their close personal relationship with A. H. Smith, president of the New York Central, gave them a most powerful leverage. So even while the debate waxed hot in public, the Vans were secretly buying land in the area where the Terminal Development is now located.

In 1920, many years after the conception of the idea—and weekly hassles with the Cleveland City Council—the actual work of clearing 17 acres for the Terminal Building was started. Graham, Anderson, Probst and White were selected as the architects and John Gill as general contractor.

The job took three years and in the process over 1000 buildings were razed and 15,000 people moved from the 104-acre area that would eventually become CUT. And then on a rainy September 28, 1923, the first shovel of dirt was turned.

Now hundreds of trucks loaded with dirt began the tedious job of preparing for the foundation. It would be the first time that concrete piers were used in the history of foundation construction to support a building the size of the Terminal Tower.

The piers, extending down more than 200 feet, set a record depth at that time. All holes were dug by hand, making the job even more difficult. Since no caisson drillers were available to dig the holes, buckets operated by electric hoists hauled the dirt and stone to the surface.

Here's what the men had to dig through in order to get to solid bedrock: 40 feet of fairly hard, somewhat plastic clay; the next 50 feet was damp, soft plastic clay; then 100 feet of dry, very hard compact clay; finally a 15-foot layer of dry, hard clay mixed with small to large boulders of shale and granite.

250 men worked continuously on three 7½-hour shifts around the clock to complete the Tower's foundation. Some 18,500 cubic yards of dirt was excavated for the foundation and foundation piers alone. Work on the foundation was completed on November 7, 1926.

The architectural treatment of the



A combination of heavyweights and streamlined cars rock and roll through a slight S curve at West 44th Street in 1953. In a few minutes, the terminal.

Now just a memory, train #9 and motor #205 wait patiently for their signal to depart the massive structure. Today's only CUT train is an EL commuter.



708-foot tower. The building was such as to blend effectively with that of the Hotel Cleveland, which some 12 years previously had been built on Superior Avenue at the east side of the Square. The tower provided a sub-symmetrical facade dominated by the shaft of the Terminal Tower.

When the building was originally planned there was but a stunted tower shown in the architect's sketch. But the Vans' dream of an imposing transportation center must have prevailed and the stumpy tower in the 1919 plan emerged a decade later as a 52-story monument which, when illuminated at night, was a beacon for all ships out in Lake Erie.

In less than a decade the Terminal Tower was completed. In the course of that decade more volume of earth was moved than that used in the construction of the Great Pyramid of Egypt, which required centuries to build. The building was dedicated June 28, 1930.

That was a great day. There was a banquet for 2500 guests, all seated in the station concourse. Speakers were the mayor of Cleveland, President Patrick E. Crowley of the New York Central and President W. L. Ross of the Nickel Plate. All gave flowery speeches and great praise to the Van Sweringen brothers. But the Vans themselves kept to their perpetual cloak of modesty and did not show up.

The 53-story Terminal Tower had cost \$88 million and was the tallest building outside of New York City. Another \$100 million was invested in the rest of the buildings in the Terminal group. It was a showcase for the world to see and for Clevelanders to wonder at and to be proud.

Few front doors to buildings anywhere compared with Cleveland's Union Terminal. The entrance consists of five arched doorways, 18 feet wide by 36 feet high, which opened into a portico or entrance lobby, 152 feet long and 34 feet wide, one of the most beautiful rooms in the building. The walls, to the spring line of a barrel vaulted ceiling, were finished in Botticino marble laid up in a regular coursed ashlar pattern and set off by shallow pilasters and a simple entablature.

The arched ceiling, with its crown 46 feet eight inches above the floor, was finished in octagonal coffers decorated in rose, gold and blue over an ivory base. The barrel vault was pierced on both sides by transverse arches over the doorways and the corresponding arches on the opposite side form semicircular panels which are occupied by seven murals painted by Jules Guerin.

In the south wall, opposite the street

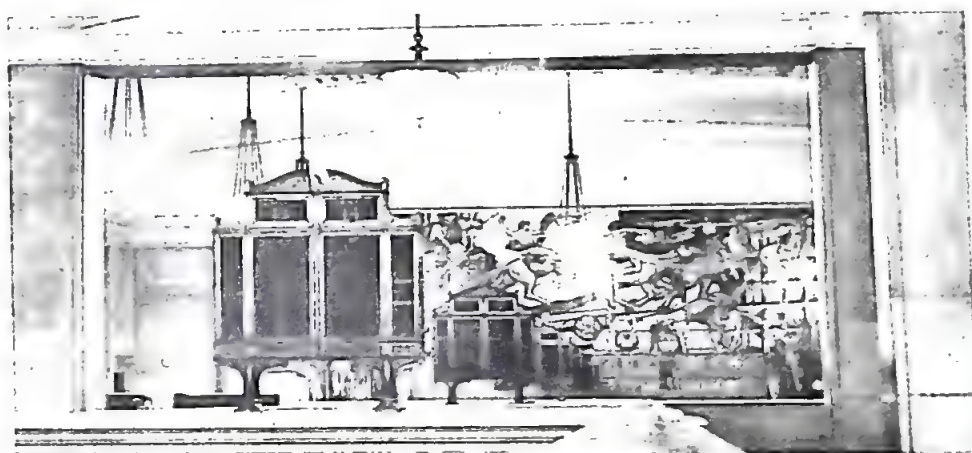
entrances, are five openings, of which the three in the center lead into a second lobby that serves as the entrance foyer to the Terminal Tower office building elevators, while the two end openings serve as the main entrances to the rail facilities of the station. Also, at each end of the portico are openings that lead to the rapid transit ramps and, at the south end, to Higbee's Department Store and, at the north, to the Cleveland Hotel with its unique Transit Bar that features O gauge scale models of the interurbans and streetcars that used to operate in Cleveland.

The portico of the Terminal Building is always a busy place, especially during the rush hours as office people, shoppers and commuters dash through. During a working day noon hour it's a favorite place for the male

population to "watch the girls go by."

The Cleveland Union Terminal electrification was the first in the United States where tunnel operation was not involved, to provide the hauling of mainline passenger trains through a large city, with a transfer to steam roads at each end of the electrified section. The electrified territory extended over 17 miles of route between its terminals at Collinwood on the east (10.45 miles east of the station) and Linndale (6.35 miles west of the station).

Eastward trains into the city headed down the old Big Four route from Berea to Linndale. Here the steam locomotive was replaced by an electric motor after a brief pause. Then the Big Four (New York Central) was followed to West 38th Street where there was an interchange with the Nickel



Even eight years ago, when this photo was taken, the vast marbled area was vacant. The large ceramic mural at the far end, once a noteworthy sight, is now all but forgotten as today the area is occupied by, get ready, a tennis court!

Train #59, the Chicagoan, heads west about to pass under the Nickel Plate connection at West 38th St. The old Big Four tracks are at the right.





Steam was most unusual in the electrified area of CUT but rules were made to be broken as then brand-new New York Central 4-8-4 Niagara #6000 is checked for clearances at the station platforms on May 20, 1945.

Resting in between their very strenuous duties, a pair of CUT motors contemplate their next assignment. In later days some of the electrics went east to the New York Central.



Plate. From there east to the Terminal, new construction took trains through cuts and out across the Cuyahoga River Valley over a 3450-foot-long viaduct with a simple through truss bridge over the river. There is a descending grade of 1.56 percent.

Continuing on east from the ter-

minal station, trains paralleled the Vans' rapid transit line to East 9th Street where they met the Nickel Plate, then followed the Nickel Plate's right-of-way as far as Superior Avenue (about East 125th). Here was located the East Cleveland Station, a pleasant suburban facility used by both New

York Central and Nickel Plate at an elevated level.

From the East Cleveland station the CUT tracks followed the New York Central Belt Line (a freight line skirting the south edge of the city) swinging away from the NKP to continue in a northeasterly direction to Collinwood Yard and the big engine terminal where the steam locomotive took over once more.

Collinwood was and is a most important division point. Here were located the large locomotive shops and car shops. All power changed here. And with the coming of the CUT a new repair shop structure was also built for the electric locomotives.

The CUT's 80-foot electric locomotives were built by Alco-GE in 1929 and 1930, 22 in the order. Designated as class P-1a, a 2-C+C-2 type, they were numbered at first in the 1050 series but later renumbered 200 through 221. They had a horsepower of 3030 and a tractive effort of 30,600 pounds, and capable of starting a train of 15 85-ton cars on a 1.56 percent grade (the grade west from the Terminal) uncompensated for a five-degree curve, and able to maintain a speed of 53 mph on level tangent track.

The electric motors, a few of which were converted for use in later years between Harmon and Grand Central Station, New York, had an operating compartment at either end. They were mounted on two six-wheel motor trucks, connected by an articulation consisting of a large vertical pin work-



ing in a ball-and-socket joint, with a maximum speed of 70 mph. They were geared low because of the westbound grade out of the Terminal and because they also did switching.

Initially all engines had multiple-unit controls but these were later removed. Each had an oil-fired flash boiler on the east end (the locomotives were never turned) for heating. Each locomotive had only a small air chime whistle because there were no grade crossings. The whistles were shrill yet pleasant and could be heard from some distance when they were used to attract attention.

Through Cleveland's Union Terminal—on the New York Central—operated some of the great name trains of all time: Pacemaker, Ohio State Limited, Southwestern Limited, Cleveland Limited, Mohawk, Missourian, Lake Shore Limited, Knickerbocker. But the greatest of them all, the Twentieth Century Limited, turned up its nose at the new station and never did officially make a Cleveland station stop, numbers 25 and 26 choosing the old mainline of the Lake Short & Michigan Southern along Cleveland's lakefront after an eastward descent from Berea in the southwest and on east to Collinwood.

The Century was an important mail hauler however, and every evening an electric motor with one or two cars would leave the Terminal for Collinwood with mail for #26. An early morning shuttle connection would bring westbound mail into the Terminal from the Century at Collinwood.

Nickel Plate trains, eastbound,

The nine-car, all-streamlined Empire State Express gets its start east with electric #215. The Belt Line can be seen just above the train.

Not all trains that came into CUT carried passengers; witness #14, a mail-only train that didn't even allow pass riders. It maintained a schedule comparable to some of the NYC's fastest passenger trains.



changed power at West 38th Street. The steam locomotive then proceeded over the Nickel Plate mainline across the Cuyahoga Valley to pick up its train again at East 37th Street.

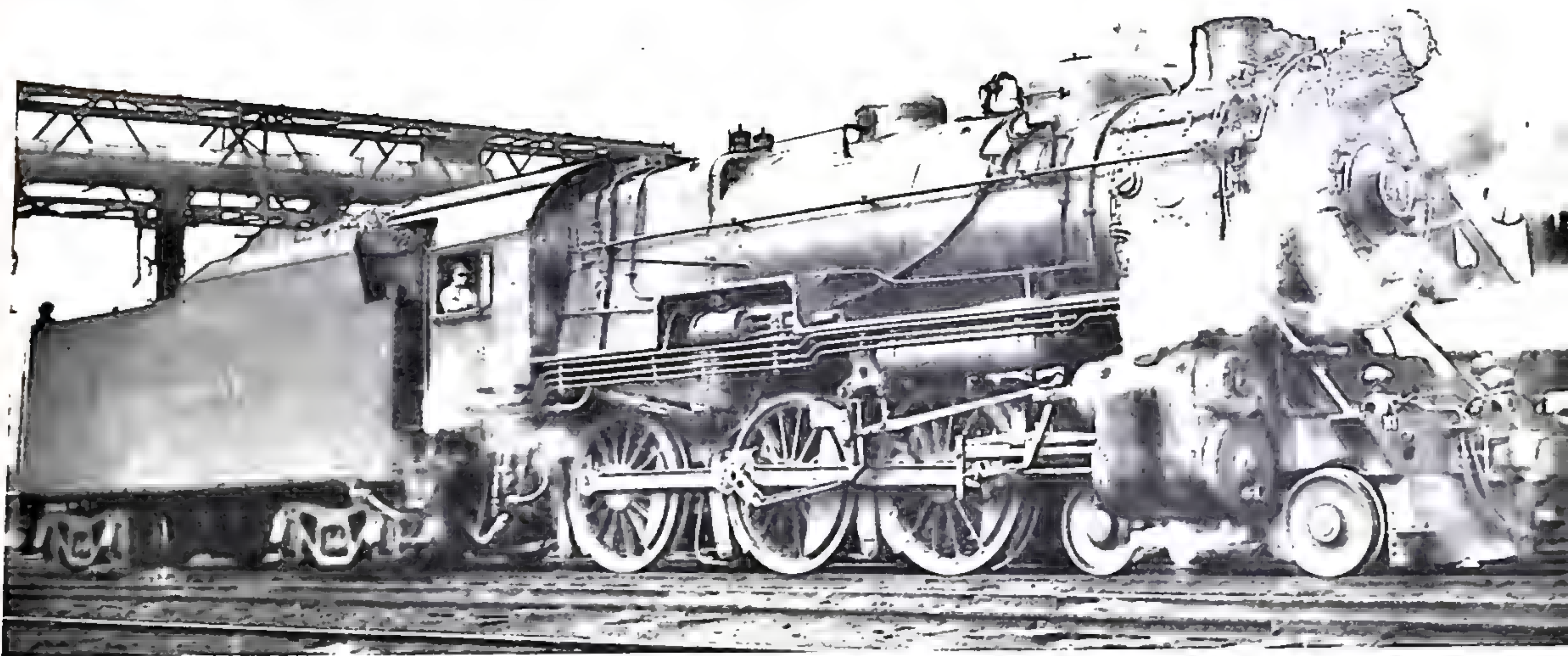
Although no initial provision had ever been made for the Baltimore & Ohio's entry into the new station, that

road did abandon its old passenger station on Canal Road and joined, as a tenant, the owner roads (New York Central—93%; Nickel Plate—7%) on June 17, 1934. B&O entered the CUT line at East 9th Street, 1.1 miles east of the Terminal by means of a switch-

(Continued on page 76)

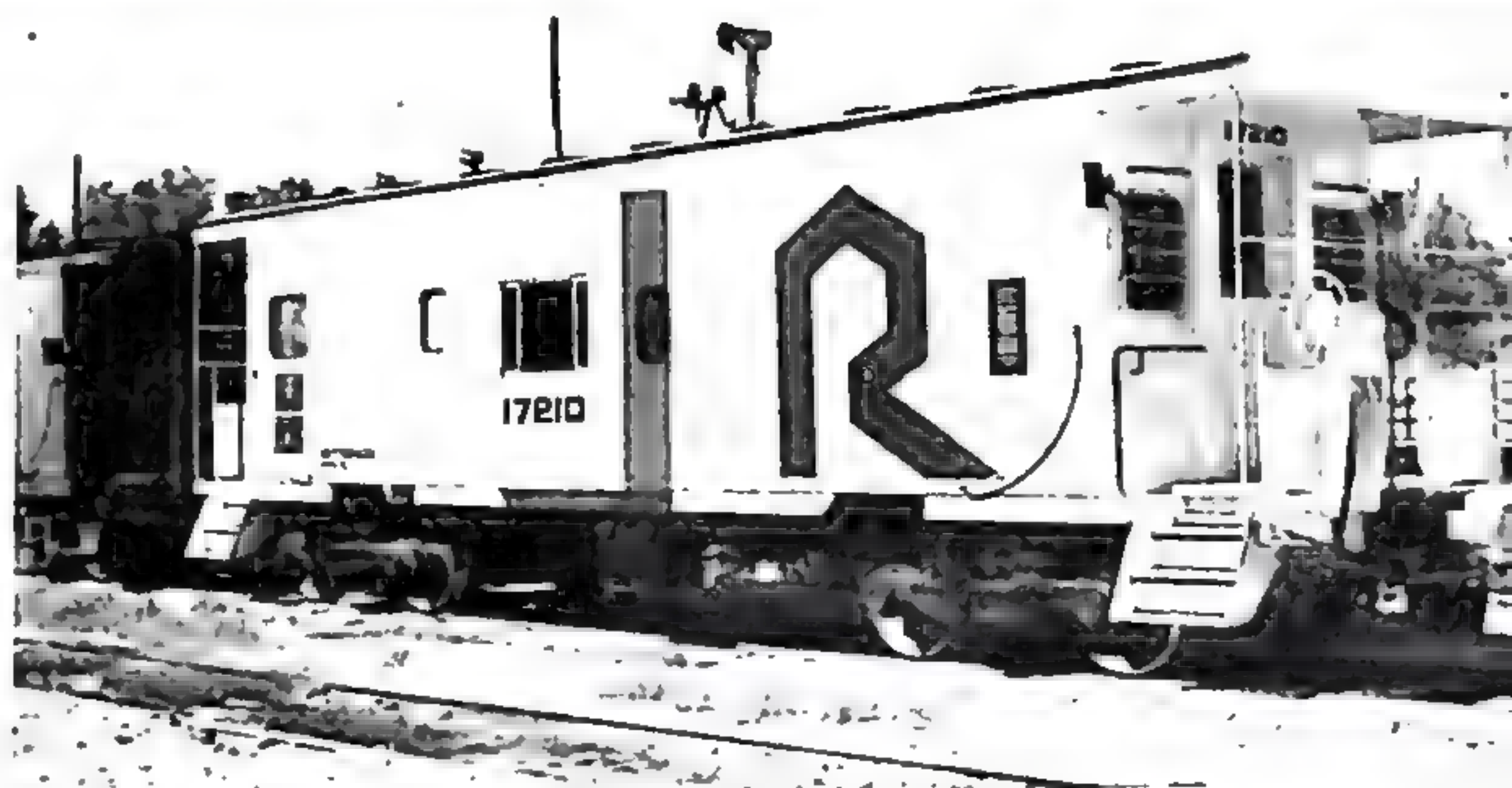
WHAT'S HAPPENING

RAIL CLASSICS will pay \$25 for each photo published in "What's Happening." News photos of all types are welcome and both color transparencies and black and white prints are acceptable. A self-addressed, stamped envelope is mandatory for return of unused material. Send to RAIL CLASSICS "What's Happening," 7950 Deering Avenue, Canoga Park, California 91304.



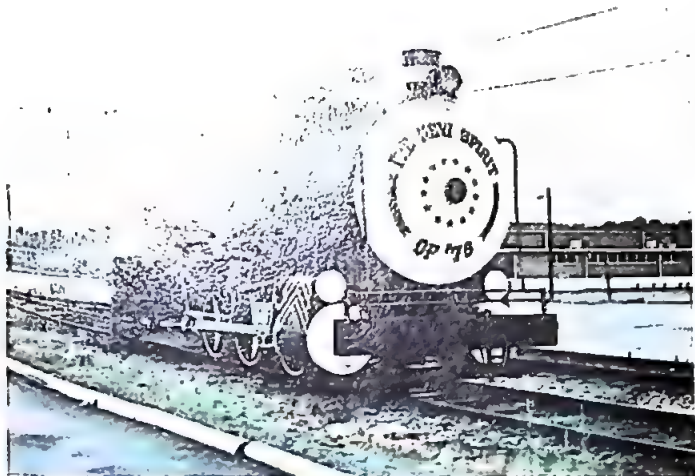
Look what may be steaming again! The Steam Locomotive #39 Preservation Fund has been formed with the sole purpose of restoring the Long Island 4-6-0 back to operating condition as part of the road's Bicentennial celebration. See Copy 19 for details. Photo shows #39 at Jamaica in 1927.

Rock Island's new blue scheme has reached the caboose population, witness #17210 at Council Bluffs, Iowa. By the time you read this The Rock plans to make up a "blue train" and tour Iowa. Get your cameras ready! George R. Cockle photo.



Santa Fe's Bicentennial units are doing more than just hauling freight. SD45-2 #5700 showed up at Temple, Texas for the annual Santa Fe employee picnic last July. With the EMD was a steam generator car, an ex-business car with display items and one of the line's newest cabooses. Louis Krizak photo.





Tired of patriotic diesels? Try a Bicentennial steam locomotive! The Beaunit Corporation of Elizabethton, Tennessee remodeled their 1936 H. K. Porter fireless cooker with this very attractive and tasteful paint scheme. The 0-6-0 sees daily service switching on the company grounds. Mary Jayne Rowe photo.



One of the latest (how many more times will that phrase be used?), red/white/blue diesels is Porter #76, owned by the Charleston Chapter of the NRHS. Unveiling June 21st and 22nd had the little centercab displayed with the first Bi-Centennial unit, Seaboard Coast Line U36B #1775. Joseph B. Kmetz photo.

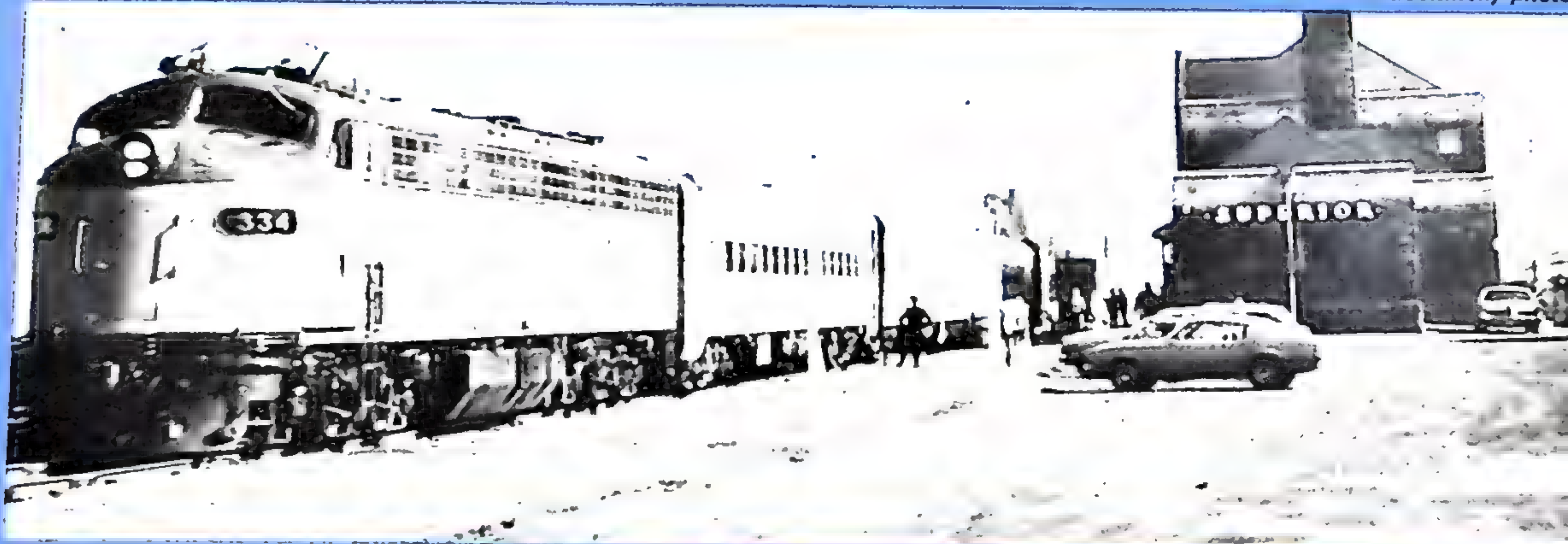
Joining the Bicentennial parade is Maine Central with a fleet of ten GE U18Bs, originally ordered by SCL. Delivered July 12th, the units are all named for a Revolutionary War figure or event with an American Eagle on the short hood. For the record, they are #400 Henry Knox, #401 Hannah Weston, #402 General John Stark, #403 General Peleg Wadsworth, #404 Kenneth Roberts, #405 Arundel, #406 Col. John Allen, #407 Unity, #408 Battle of Bagaduce, and #409 Ethan Allen. Allan R. Autino photo.





GE's answer to the Long Island diesel push-pull trains is this four-car gas turbine electric. The idea is to run by electric in third rail territory and gas turbine after that. The set is seen on the Flushing Meadow Park line. Robert Gayer photo.

Amtrak's newest train, the Arrowhead, during a station stop at Superior, Wisconsin, before departing for Minneapolis. The train, begun April 15th, makes no stop but does have a bus connection to Duluth, just across the river from Superior. Steve Gillschinsky photo.



Delaware and Hudson's famed Sharks drew a fantrip assignment recently, sponsored by the Mohawk and Hudson Chapter of the NRHS. Kip Grant caught #1216 and sister #1205 backing onto the business car #200 while Jim Shaughnessy photographed the train following northbound through Port Henry, New York.

rail classics



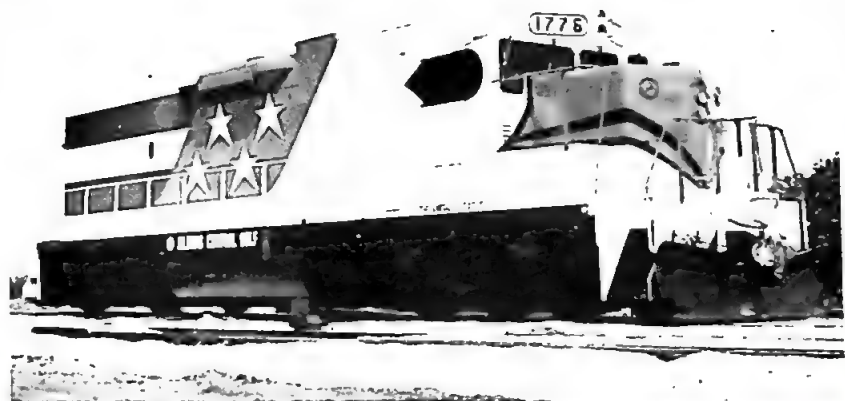


View of the quainter looking stations on the Western Pacific
at the all wood Greenville, California office, just north of
Father River Canyon. The station was recently closed
(September 8th) with all operations moved back to Keddie,
which itself was closed for a short period. The station is
shortly scheduled for demolition. Denis Dunning photo.

Train returned to the Georgetown Loop June 21st with a
freight car hauled by Colorado Central #44. Slightly more
than a quarter of the 4 1/2 mile Loop had been completed
when this photo taken last summer, with completion hoped
for sometime next June. Kenneth Jessen photo.



Illinois Central Gulf christened a second "American Eagle"
to take the place of the first, wrecked on its initial run in a
side crossing accident. The unit, ex-9503, has a plaque
commemorating the engineer who was killed aboard
the original Eagle. Credit ICG Asst. Graphics Designer
Tom Doyle for the design and company photographer
Mark Tapio for the photo.



With the current craze of using old railroad equipment
in restaurants still with us, we'd like you to witness one
more car being converted. Carney's Hamburgers and
Hot Dogs purchased UP Chair Car #535 and plopped it
right in the middle of LA's famous Sunset Strip last August.
Les Moran photo.



The farmer stood outside the tavern on the main street of Fairfield, Nebraska, and turned in response to the honk of an approaching freight on the Union Pacific line that knifes through the south edge of town. The gates came down and the lights flashed as a freight whipped through town at 65 per, led by four blue units with a large white eagle on the side. "Say," his friend from a neighboring town exclaimed, "Those aren't Union Pacific engines! Those look like Missouri Pacific and it don't even run through here!"

"Yeah," the farmer replied without changing his expression in the least. "Someone must have forgotten to

throw that darn switch down in Kansas City again and those silly fools got lost clear up here but they ain't even realized it yet!"

This same story could be repeated substituting units of the Frisco or the N&W for those of the MoP. A stranger in Fairfield could spend the whole day looking down main street and see units from those roads flashing past in addition to the more customary Union Pacific yellow. Fairfield is located on a stretch of the Union Pacific that cuts diagonally across northern Kansas and south central Nebraska and is one of the least-known hot pieces of U.P. trackage, commonly known as the Gibbon Cutoff.

The Gibbon Cutoff stretches from the town of Gibbon, Nebraska, on the UP's double-tracked main line from Council Bluffs to the coast, to Menoken, Kansas, just west of Topeka, where it intersects the single-track Denver to Kansas City main line once known as the Kansas Pacific. Technically, the true Gibbon Cutoff extends only from Gibbon to Hastings, Nebraska, a distance of only 28 miles. It was constructed fairly late in the railroad building era, in 1913 and 1914 as the Hastings & Northwestern Railroad, and formed the last link in the Gibbon to Menoken line, all of which is now commonly referred to as the Gibbon Cutoff. The UP acquired a

UP's WEST COAST SHORTCUT

By Richard C. Kistler and
Richard L. Schmeling

Known as the Gibbon Cutoff, this short hot stretch of track sees almost everything the UP owns plus a variety of pool power from many roads.



line from Upland, Kansas, to Grand Island, Nebraska, which absorbed the St. Joseph & Grand Island Railroad. The Upland to Marysville section was constructed by the Topeka & Northwestern in 1910 and was later acquired by the UP. With the completion of the cutoff the indirect connection with the UP main in Nebraska via Grand Island was eliminated and the UP had a 251.8-mile direct diagonal connecting route.

This line has always served as a short cut for traffic moving from Kansas City to the Pacific Coast, and used to be the stomping grounds of the 9000 class 4-12-2s and 5000 class 2-10-2s, but only in the past ten years,



Photos by the authors unless indicated.

Flat-faced Brill M-38 waits at Marysville for its human consist in 1951. Passenger service was not to see too many more years. R. L. Rumbolz photo.



thanks to the advent of power pooling and run-through trains has the full potential of the line been realized.

The line has always been basically single track running, but increasing traffic demanded the installation of Centralized Traffic Control and long passing sidings. Perhaps the dramatic growth of the traffic on this line can best be illustrated by a look at the tonnage figures for the line for the past 25 years:

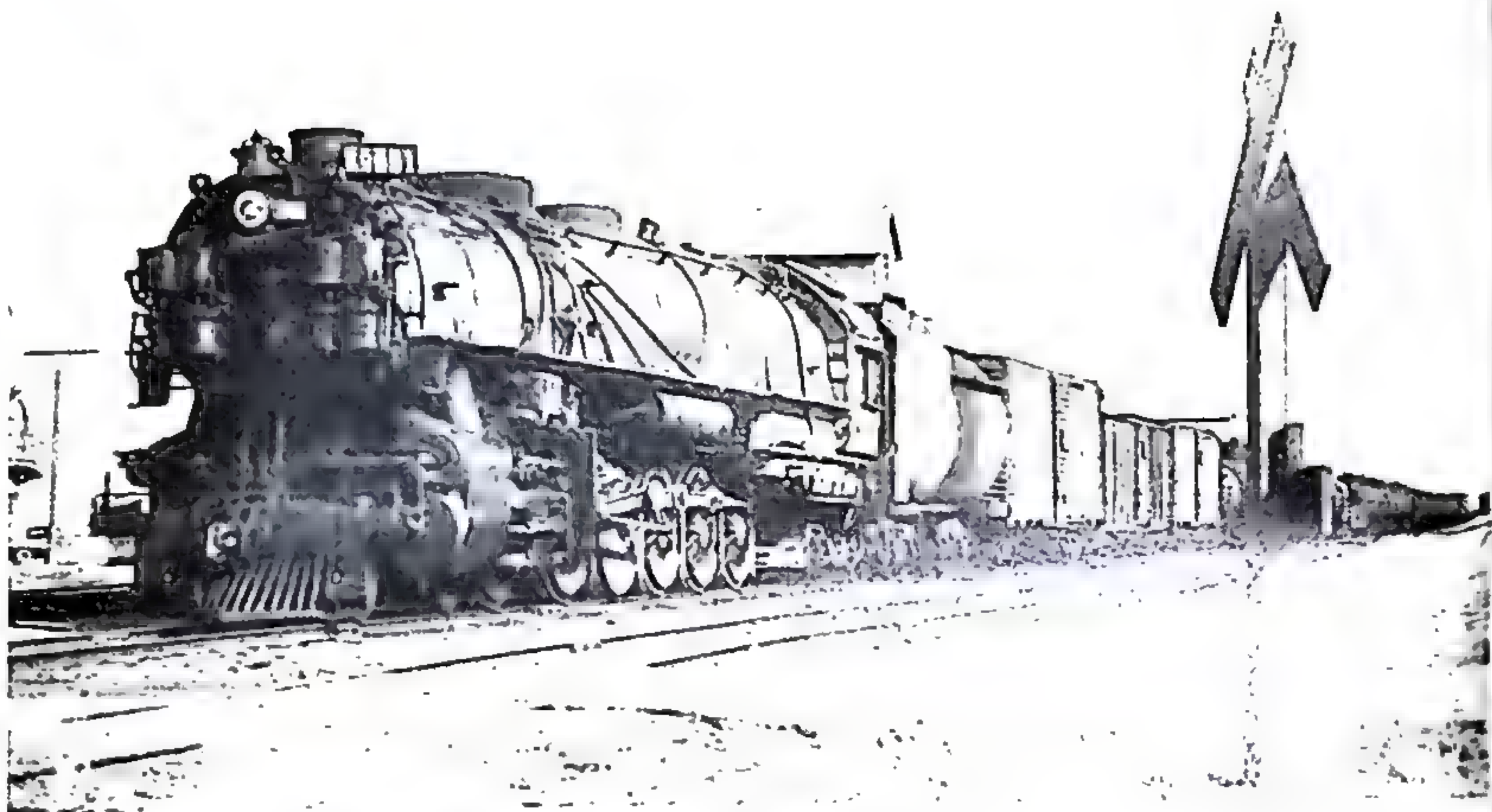
**ANNUAL TONNAGE FOR
SELECTED YEARS**
(In Millions of Tons)

	1950	1960	1967	1970	1974
Topeka to Marysville	23.2	25.3	30.4	38.8	43.4
Marysville to Hastings	20.1	20.4	24.8	32.4	36.2
Hastings to Gibbon	19.8	20.0	23.8	31.5	35.9

In fact, comparing the frequency of movements on the UP double-tracked main line west of Gibbon, where the cutoff traffic feeds into the main line westbound and diverges from it eastbound, with the frequency east of Gibbon toward Omaha and Council Bluffs, the main line east of Gibbon seems inactive in comparison to that west of Gibbon, and the difference all flows on the Cutoff.

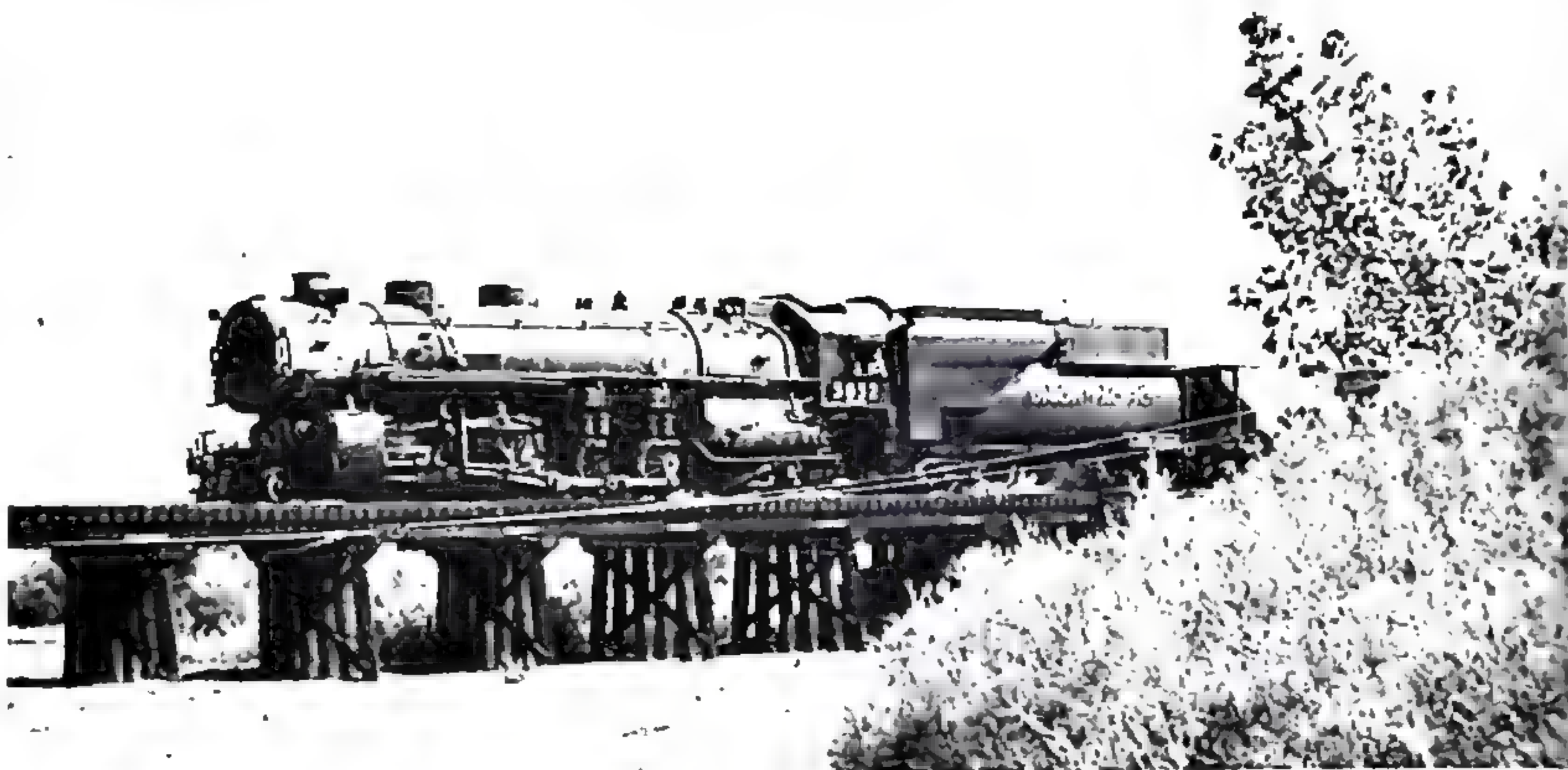
Traffic has increased to such an extent that the Cutoff had been taxed to the limit during periods of heavy traffic. Accordingly, the UP earmarked 14 million dollars in 1973 and 1974 for improvements on this line. The following improvements were made pursuant to the plan: passing tracks have been extended from their former lengths of approximately 7000 feet to 13,500 feet and six additional passing tracks have been added with all passing tracks relaid with 133-pound rail rather than the former 90-pound rail; a second track has been built from five miles north of Marysville, Kansas, to a point five miles south of that important yard to eliminate congestion; there has been a 15-mile line change northwest of Marysville to reduce the grade from 1.1% to 0.8%; and curves have been eased at various points along the line which, in one location, required the diversion of the channel of a major stream.

Work on the various improvements began in the spring of 1973 and the project was completed in the latter part of 1974, on schedule, and without interfering with the flow of traffic on the line. When the heavy earthmoving equipment had finished, over 3.5 million yards of fill had been utilized in various line changes and improvements. The Union Pacific character-



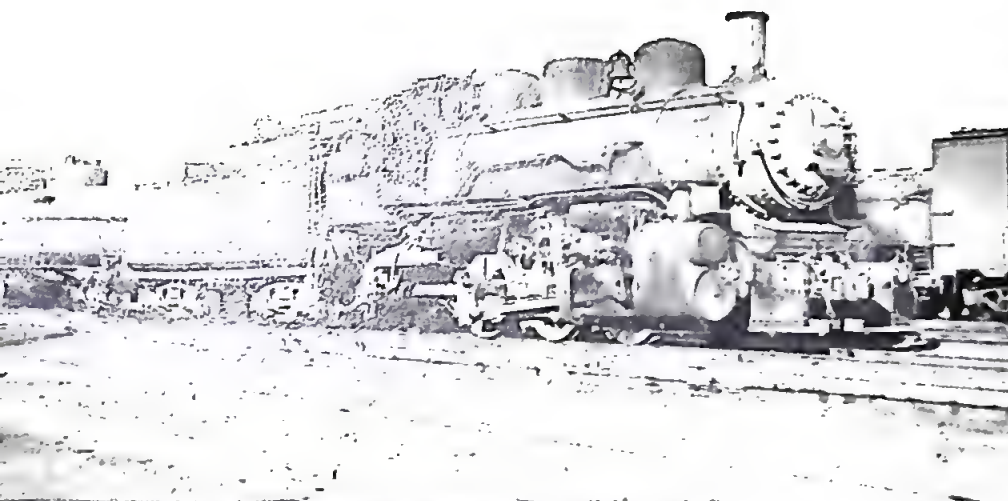
Part of the Gibbon-Menoken line traverses flat country, enabling trains to make excellent time. Perfect example; 4-12-2 #9031 holding the mainline with a westbound extra at Fairfield, Nebraska. John H. Conant photo.

Crossing the Platte River thetstle westbound was a cinch compared to the run the other way to get over Denman Hill. 2-10-2 #5052 poses in the late 40s for John H. Conant's camera.



Alco freight cabs were popular on the Cutoff during the mid-50s, such as 1619-1622B-1603 preparing to depart the Marysville yard in 1956. Alco PAs regearred for freight service were used on this line also.



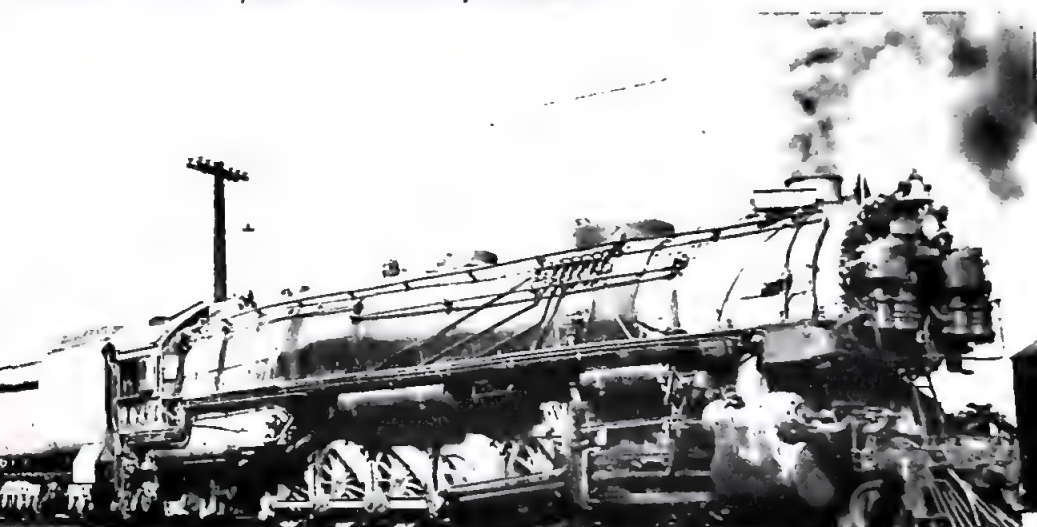


One of the very few USRA-designed switchers to work on the Union Pacific, 0-6-0 #4602, works the Marysville yard with a cut of cars. R. L. Rumbolz photo. R. L. Schmeling collection.

Marysville was a gathering place for motor car trains while passenger service lasted on the Cutoff. In addition to the Cutoff trains, a motor from Topeka and from Omaha met trains on the old St. Joe and Grand Island at this point. R. L. Rumbolz



Waiting for the first section of #256, three-cylindered 4-12-2 #9044 steams impatiently at Marysville on September 19, 1949. The Santa Fe types and the line's own Union Pacifics form the bulk of mainline power in the last days of steam.



izes the project as one of the most ambitious track construction programs ever undertaken in the history of the company.

In addition to the work on the Cutoff itself, considerable reworking of the track and signals at Gibbon has taken place. Traffic from the Cutoff westbound to the UP's mammoth Bailey Yard at North Platte, 108 miles west of Gibbon, and eastbound onto the Cutoff was formerly controlled by a small interlocking plant located in the Gibbon depot. That plant has been replaced and a new system has been installed to be remotely controlled from North Platte. Trackage from Gibbon west to Buda on the double-track main line has been bi-directionally signaled.

High speed double crossovers have been installed on the double track main just east of its junction with the Cutoff and another pair just west of the junction. A third pair was installed at Buda just before the end of the bi-directional signaling. This allows traffic from Omaha-Council Bluffs to run on either of the double tracks and traffic to or from the Cutoff to enter or leave from or to either of the two tracks on the main line, giving the dispatcher a greater measure of flexibility in routing and eliminating a potential bottleneck.

In August of 1974, a sub-project was authorized to the tune of \$460,000 which will upgrade the existing industrial lead from Topeka to Menoken to a second main. Both of these tracks will be bi-directionally signaled and CTC controlled in a manner similar to the Gibbon installation to eliminate congestion in and around Menoken where the Cutoff traffic merges into and diverges from the Kansas City-Denver main.

Not directly related to the Cutoff itself, but certainly a part of the overall picture are improvements at UP's Armstrong Yard in Kansas City costing an additional \$2.4 million. A new yardmaster's control tower has been constructed and new fast tracks through the terminal area have been installed with CTC control. Thus, all Kansas City to Gibbon traffic will now be under CTC control.

A large portion of the traffic growth on the Cutoff can be attributed to power pooling and run-through trains. In August of 1966 a run-through train in each direction with pooled N&W power was established, and by September a second pair of N&W trains was added. In October of that year a run-through train in each direction was established with the Frisco with power from that road being pooled with UP units also. In January of 1970 a pair of run-throughs was established with the Missouri Pacific and a second



Twenty-two years ago, 4-12-2 #277 eased into the Hastings yard. Formerly a crew change point, Hastings has since been eliminated and the Union Pacific type in charge has given away to yellow diesels. R. L. Schmeling collection.



In a view to make the builder quite happy, a pair of General Electric U50Cs team up just east of Davenport, Nebraska on a westbound freight eventually destined for the West Coast. While comparatively young, a few of the monster 5000 hp GE's have been sidetracked and stripped of parts, with rumors that some may not run again.





Just west of Gibbon, UP SD24 #413 leads a quartet of high-nose Norfolk and Western four and six-axle power eastbound with a Kansas City bound freight in October, 1974. Frisco and Missouri Pacific units also participate in various pool assignments.

Now here's something worth coming trackside for; a high-nosed Norfolk and Western U28B teaming up with a pair of original U50s. Unfortunately if you haven't been to the Cutoff this scene will not be seen again; the four-truck U50s have been traded in.



pair was added a year later. For a time Southern units were also pooled on the Cutoff, but this has been discontinued.

The energy crisis has had an impact on the Cutoff also. The UP has quantities of low-sulphur coal in its mines in Wyoming. These mines were shut down when the last of UP steam was phased out, but they are being reopened to supply the electric power industry's ever-expanding demands. At the present time a train of 77 cars is operated over the Cutoff on a five-day turn. The train originates at the mines in Hanna, Wyoming, and is delivered to the Santa Fe in Kansas City for a split delivery to nearby generating stations. A second train of 77 cars is to be added in the near future to double the annual capacity of this move. Another coalie of 100 cars operates on a four-day turn from the Hanna Basin to Kansas City where the Kansas City Southern delivers it

to destination.

In 1978 a third unit movement utilizing two 110-car trains is projected, with an increase to eight train sets by 1982. This traffic will come onto the Cutoff from the BN at Hastings, Nebraska, and will terminate in Northeastern Kansas.

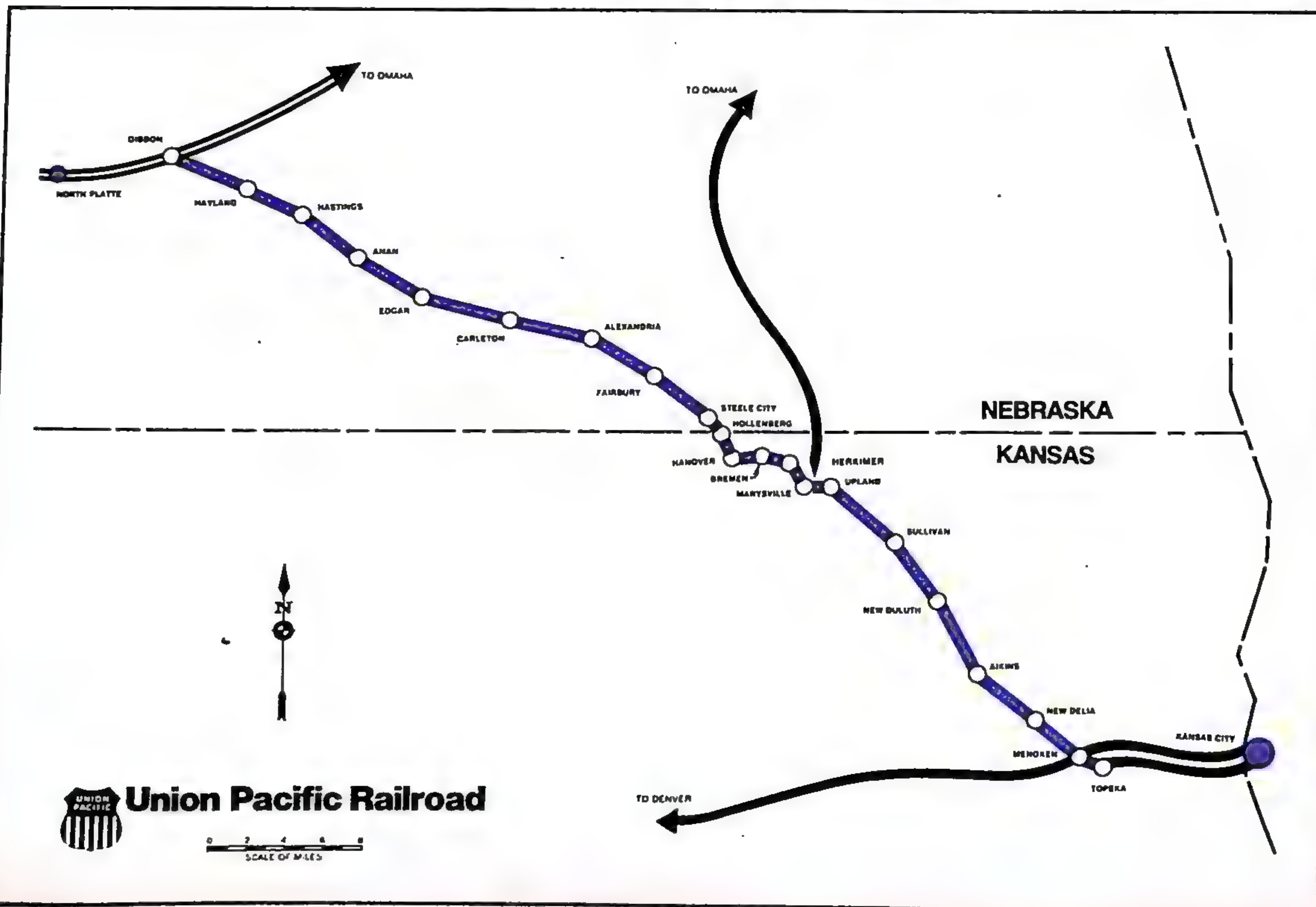
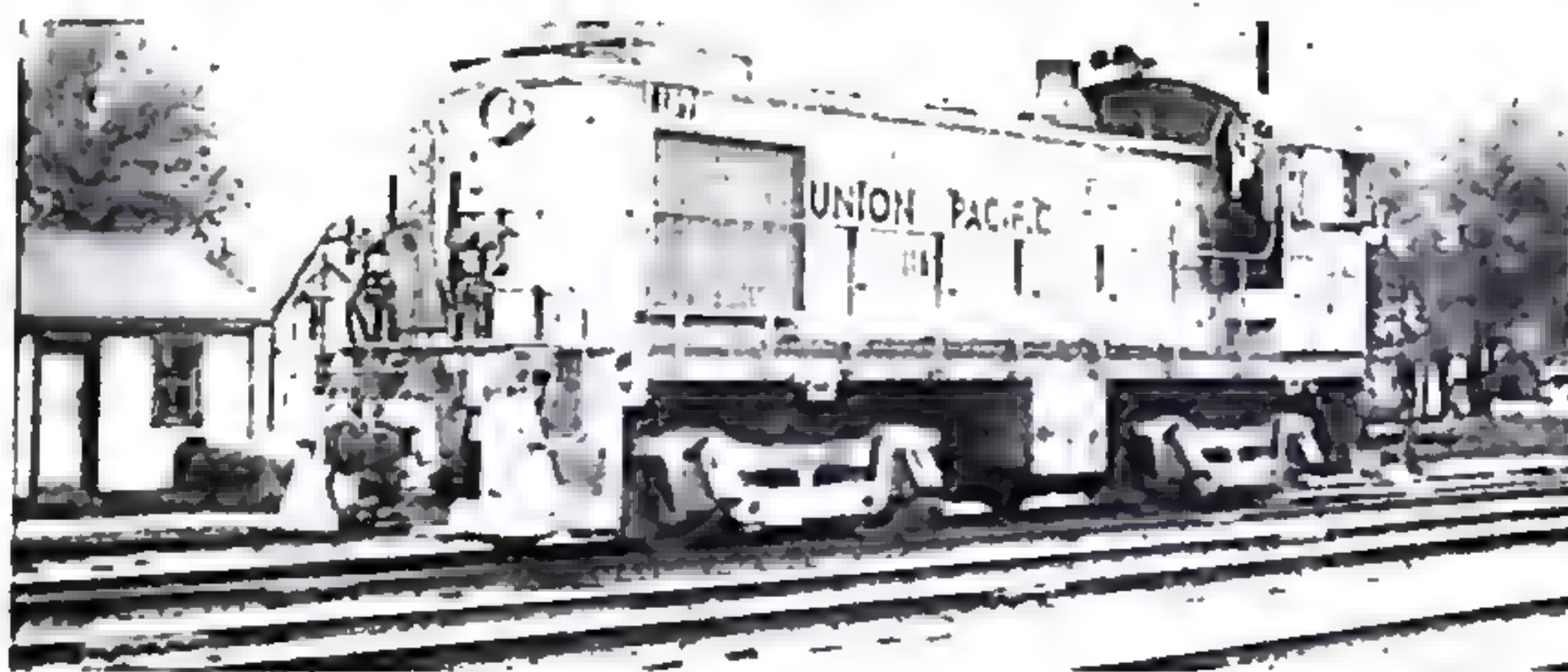
Additional coal traverses the Cutoff at the present time in non-unit train freights mixed with other cargo, and this traffic is expected to increase in volume also. Undoubtedly the projection that the Cutoff will see in excess of 11 million tons of coal per year by 1982 furnished part of the motivation for the authorization for the improvements recently completed.

Until recently the Gibbon Cutoff has always been little photographed, being overshadowed by the east-west lines in Nebraska and Kansas, but traffic density is now such that it is a worthwhile operation to observe. Part of the difficulty in capturing this line

is that the highway network in the Plains States runs directly north and south and east and west. Whereas the Cutoff, running diagonally as it does, is not paralleled by major highways for any great distance.

One of the focal points for activity on the Cutoff is Marysville, located in north central Kansas a short distance from the Nebraska border. As elsewhere, crew districts have recently been lengthened on the UP, and Marysville is the only crew change point between North Platte and Kansas City on the Cutoff. In addition to the Cutoff traffic, Marysville is also the feed in point for traffic on the old St. Joseph & Grand Island line to St. Joseph, Missouri, and sees a couple of trains each way each day on the UP's roundabout Council Bluffs to Kansas City line via Lincoln, Nebraska, with connections at Marysville for the West Coast. At the north end of the Marysville yards the line crosses

Typical of the switchers assigned to the Cutoff during the Alco days was S4 #1169 seen at Hastings, April 20, 1967. EMD GP9s replaced them in local service.





Giving her all she's got. #9024 blasts across the Platte River making a run for Denman Hill. The Cutoff was familiar stomping grounds for both the Union Pacific and Santa Fe type locomotives. John H. Conant photo.

UP's massive rebuilding program including double-tracking the approach just north of the Marysville yard which should help eliminate terminal delays. Union Pacific photo.



Even with the best of railroading, not everything always goes well. 2-10-2 #5089 left the rails after hitting an obstruction placed on the track in the summer of 1947, derailing a good part of the train and closing the line for hours before a shoo-fly could be established. John H. Conant photo.



the Big Blue River and a second bridge of considerable proportion had to be erected to provide the double track lead into the yard. Just north of Marysville on U.S. Highway 77 are some high bluffs which provide an ideal vantage point for photography during the afternoon hours.

A rather picturesque section of the Cutoff lies south of Fairbury, Nebraska, along the Little Blue River Valley. State Highway Eight parallels the UP line for a number of miles and offers many morning photo opportunities.

Another interesting location for photos is the long Platte River Bridge which can be seen from Interstate 80, a major link in the Interstate System which traverses Nebraska. The bridge is open and is best for afternoon shots which can be taken from State Connecting Link 10D just to the west.

For the photographer who wants the best of both worlds, a stakeout just west of Gibbon will catch Cutoff traffic as well as traffic on the double-tracked line from Council Bluffs, and the rails are seldom idle.

As important as the Cutoff is to the UP because of its freight-carrying potential, it has never been a major passenger artery of the system. No streamliners were regularly scheduled over its tracks, and by 1941 the standard weight passenger trains, remnants of the StJ&GI varnish, had been replaced by motor cars. Two runs each way per day traversed the Cutoff from Marysville as far as Hastings where they continued over the original StJ&GI trackage to Grand Island. A connection was made at Marysville with a motor car train from Kansas City and with runs on the line to Council Bluffs. After World War II a pair of the motor trains were dropped and by 1955 the Cutoff was freight only. Occasionally the "City of St. Louis" and the "Portland Rose" were detoured over the Cutoff when the Kansas City-Denver line was blocked west of Menoken.

Motive power on the Cutoff since dieselization has been a mix of most classes of power seen elsewhere on the UP system. The Cutoff felt the passage of many of the 1600 class Alco FA-2s until their retirement, and U50Bs, U50Cs, DD35s and smaller power have all run off miles on the Cutoff. One notable exception in the power parade has been the 6900 series Centennials which seldom, if ever, venture down that line.

The UP calls the Cutoff its new super line and few who have seen the changes that have taken place along it in the past several years can argue with such a categorization. Surely the upgrading of this line will rank as one of the major railway undertakings of the decade!

Photo Gallery



Extra 1536 North moves through Norlina, N.C. on SCL's double-track CTC controlled mainline with a pair of Alco RSCs leading 15 cars. The train will turn around at Norlina and return to Henderson, then leave the main for Durham, N.C., the original starting point. Curt Tillotson, Jr. photo.

Milwaukee Road's Little Joes may have turned their last mile, but not the South Shore's small fleet. The only other railroad to operate the double-ended juice jobs in the U.S. CSB&SS #801 walks an eastbound freight through the streets of Michigan City, Indiana. George A. Forero, Jr. photo.



Contributors having their photos published in the Photo Gallery will have their choice of payment: \$5.00 per photo or a one year's subscription to RAIL CLASSICS. When sending material for the Gallery please state which method of payment you prefer. And all submissions should be black and white prints or color transparencies; sorry, no color prints.





With a wreck tying up the main, Soo Line 4-8-2 #4010 gets more than casual once-over from Gordon E. Lloyd, snapping this portrait at Mundellen, Illinois on April 2, 1949.

Idling out the night at Hagerstown, Maryland, Western Maryland F7A 152 started out life as an F3A in June, 1947, later being rebuilt in April, 1954. In recent months much of the unit has been declared redundant by parent Chessie System. Credit John J. Hilton for a fine shot.



Amtrak

PHOTO OF THE MONTH

This month's winner is J. J. Young, Jr. for this interesting under the wires shot of a Metroliner leaving Washington, D.C. Rules for the contest are easy: anything Amtrak, train or otherwise.





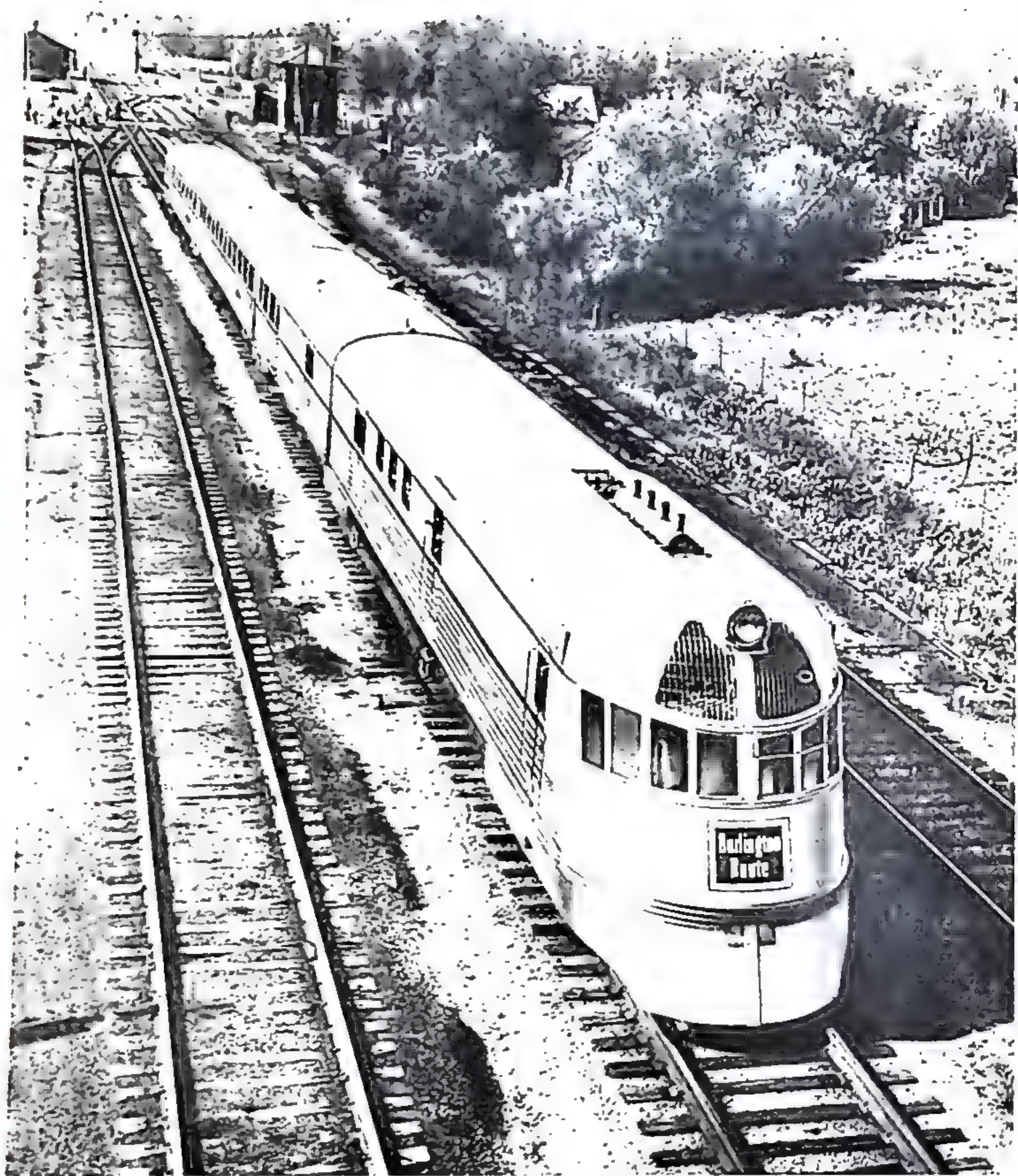


So you think you had a BN stereotype set in your mind? This scene should punch holes in it; moving just east of Rochford, South Dakota, a pair of former CB&Q SD9s work upgrade past an unused gold mine with the tri-weekly Edgemont-Deadwood local. The date is April of 1974. Gerald Edgar photo.

Headed for Vancouver, British Columbia, a trio of Canadian Pacific SD40s run elephant style through the Canadian Rockies. The western part of CP operated the last of the FM C-liners and road-switchers, as well as the line's only Baldwins. Kenneth Ardinger photo.

Bearing down on the camera, a pair of Rock Island E units work commuter train #423 westbound through New Lenox, Illinois in June of 1974. The simplified Rock Island scheme has since been supplanted by a new all-Blue concept. Ed Merzlock photo.





After being turned over to the Burlington in April 1934 the streamlined ZEPHYR was run on several barnstorming trips throughout the country. Burlington Northern.

THE STREAMLINE STYLE

By Robert C. Reed

Beginning in the mid-thirties, streamlining swept across America leaving its touch on almost every railroad it encountered.

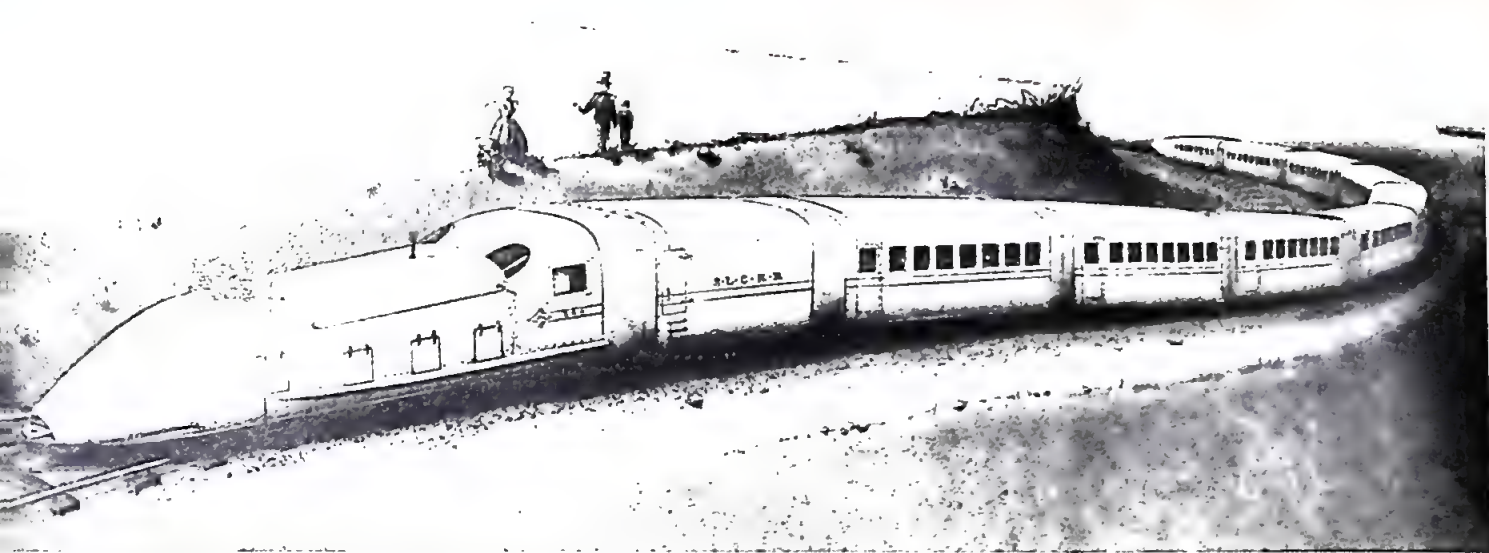
On the morning of May 26, 1934, the radically styled, sleek streamliner Burlington Zephyr slipped out of Denver Union Station, its polished metal skin flashing red in the sunrise. The Zephyr's task was to make a non-stop speed run across the heartland of America between dawn and dusk to open the Century of Progress Exposition. Crowds gathered at crossings and in towns along the route as the diesel streamliner flashed by, the deep blare of the airhorn announcing the beginning of the streamline era.

The streamlined style, which began by rounding corners of immobile objects to usher in the modern, swept across America in the 1930s. With its emphasis on sleek smooth surfaces with clean unbroken lines, the refined form keyed a new efficiency in every aspect of American life. The word *streamlined* was first used to describe the glamorous new trains that saved the passenger train from near extinction for another 30 years. Thus streamlining came to symbolize all that was modern and moved quickly.

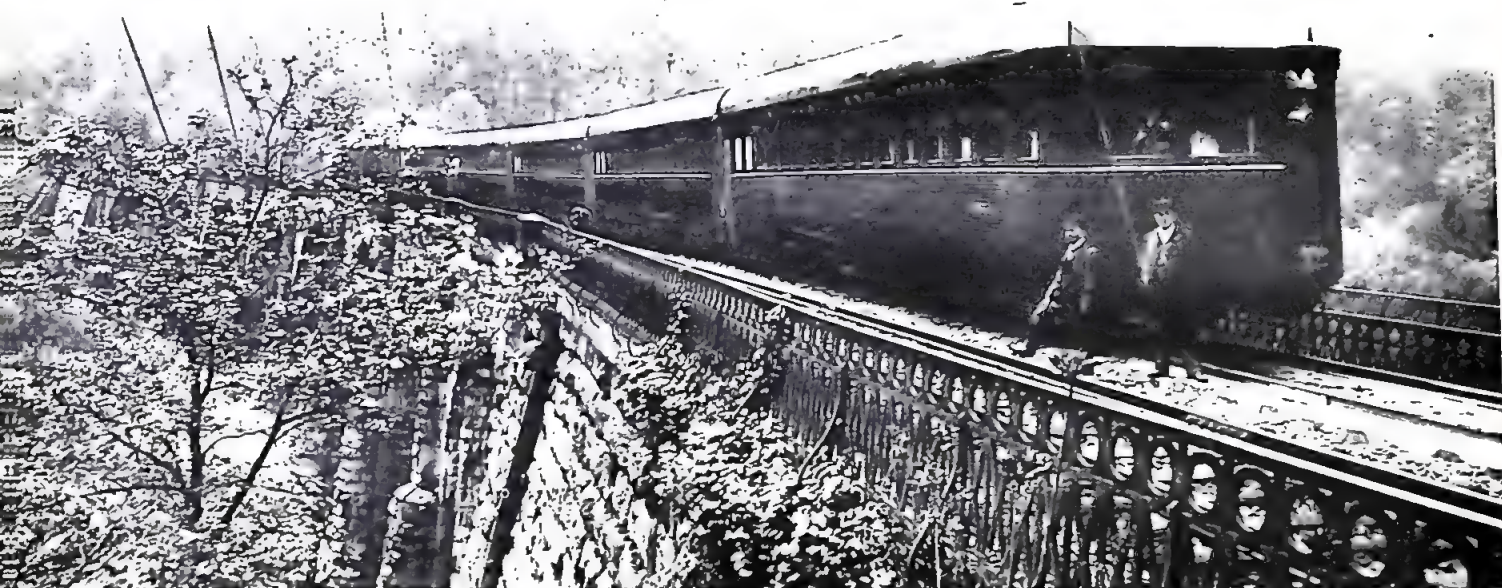
The historical origins of railroad streamlining are complex and remote. At about the time of the Civil War, Samuel Calthrop designed a train that foreshadowed almost every principle of modern streamlining as we know it. His train boasted a smooth, tapered locomotive with a conical nose and curved glass windshield on a sloping engineer's cab, fully articulated passenger cars encased in smooth metal sheathes, and even a tapering tail on the rear car. All this he proposed in 1865. Another man who took up the challenge of building a streamline train was Frederick Upham Adams, who in 1890 built his famed *Wind-splitter* which operated for a time over the Baltimore & Ohio between Washington and Baltimore.

In 1905 William R. McKen designa a futuristic rail motor car that foreshadowed many of the features of the first streamlined trains of the mid-1930s such as the Union Pacific's *City of Salina* and the Burlington's *Zephyr*. The McKen car was distinctive looking and so advanced in its styling that it was not at first universally welcomed by traditional-minded railroaders or travelers. His styling used a sharp, wind-splitting front end that tapered back to the body of the car, which was sheathed in a smooth, streamline casing. The rear was well rounded and the forerunner of the modern observation car.

Although there were many attempts, prior to the 1930s, to cut wind drag, the Reading, Baltimore & Ohio, and the Delaware & Hudson began to semi-streamline their steam locomotives by hiding much of the locomotive's piping under a jacket, and thus giving the

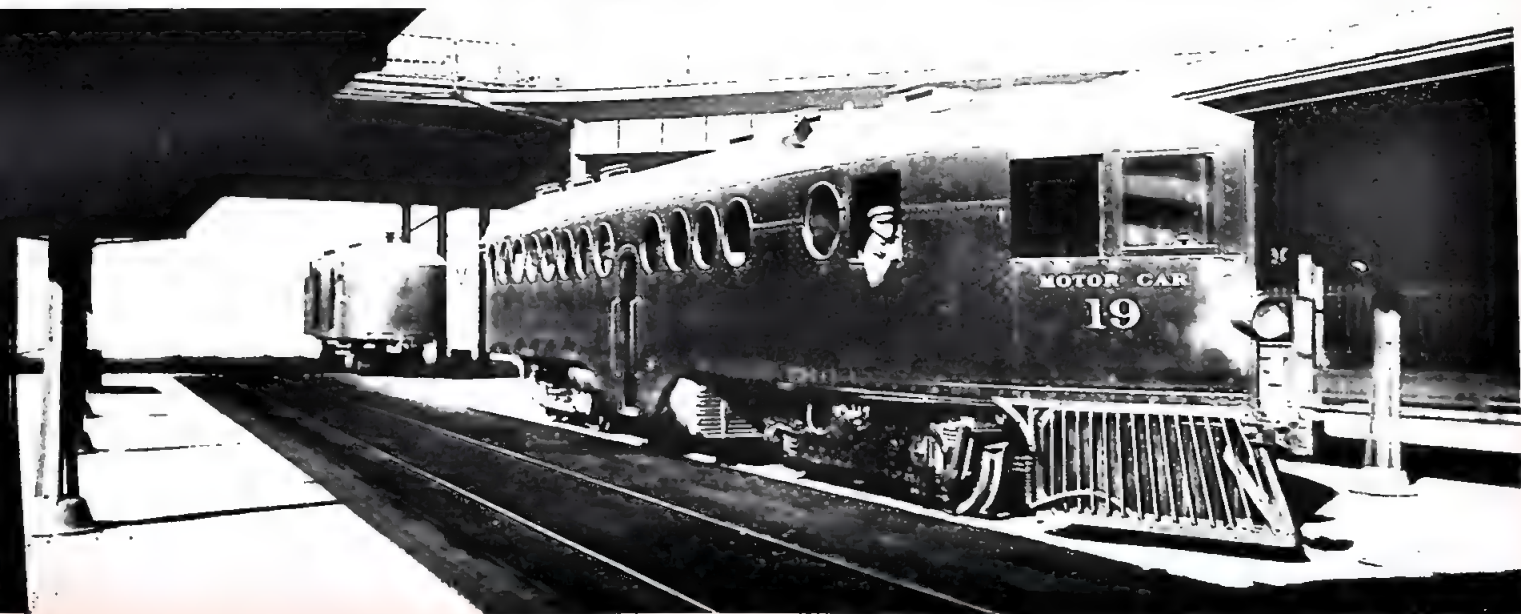


Calthrop's prophetic train of 1865 foreshadowed nearly every principle of streamlining as we know it today.



The Adams WINDSPLITTER shows its aerodynamically tapered fish tail and ribbed shirting which was carried to within inches of the track. The cars were run on the Baltimore & Ohio between Baltimore and Washington in 1900.

The McKeen Motor Car was streamlined years ahead of its time. Note the wind-splitting prow, sleek smooth shell, porthole windows, complete with round tail end.





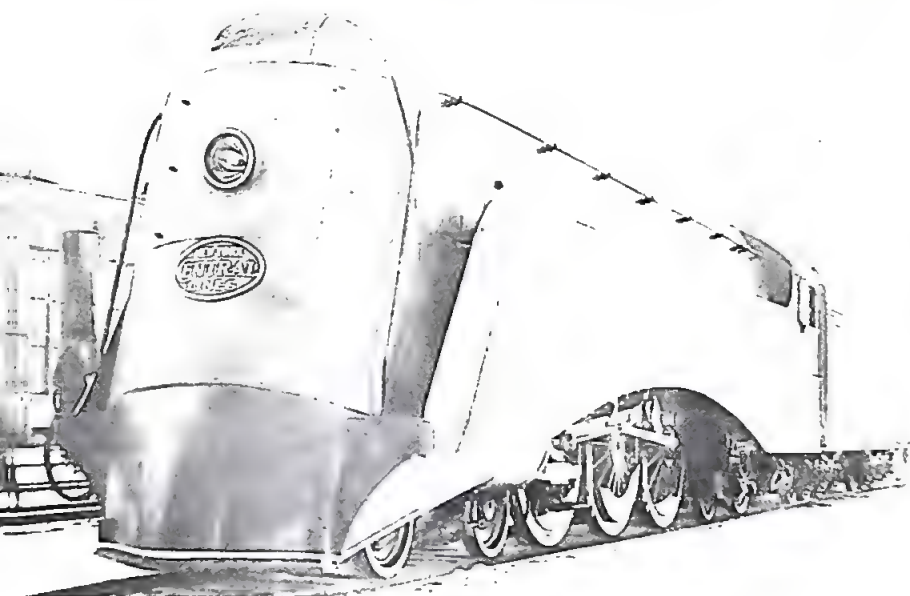
Union Pacific's pioneer streamliner, the CITY OF SALINA, was the forerunner of a fleet of streamliners that provided service between Chicago and the Pacific Coast. Union Pacific photo.

Henry Dreyfuss designed New York Central's MERCURY. Two class K-5 Pacifics were rebuilt and shrouded together with a string of standard rebuilt cars. In this dramatic scene outside Cleveland, the fast moving MERCURY races for Detroit.



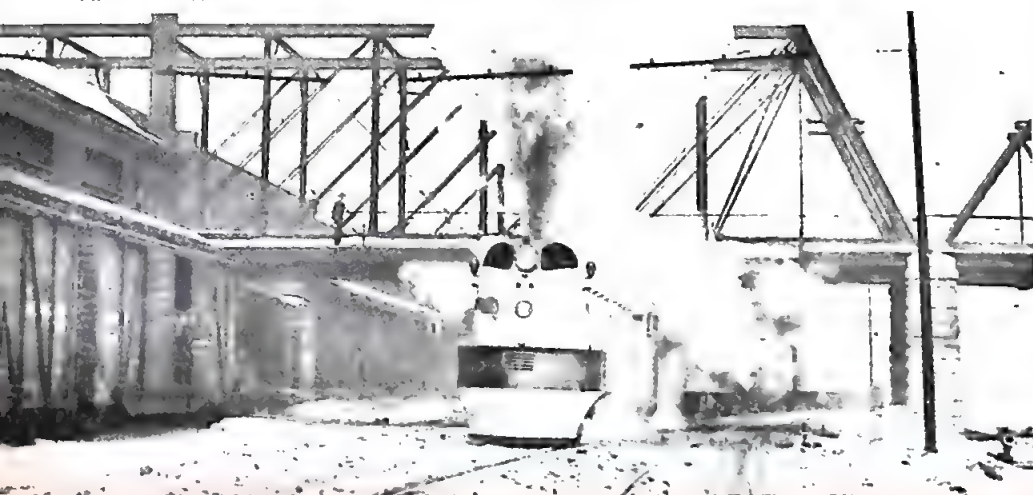


The Rock Island introduced their ROCKET trains in 1937, using General Motors streamlined production diesels for power.



Earliest steam locomotive to be given streamline shrouding was the New York Central's "COMMODORE VANDERBILT" of 1934, designed for the 20th CENTURY LIMITED.

Under a rolling cloud of smoke, the classic HIAWATHA of the Milwaukee Road leaves Chicago Union Station. These engines were the first newly built streamlined steam locomotives.
A. W. Johnson.



machine a bit of style by carrying the running board straight back through the cab. The headlight was then placed inside the smokebox door to clean up the front, and a long hood put on top of the boiler to cover the dome and sandbox under a single, uniform cowl. Skirting of the driving wheels was believed wrong at the time. In general, semi-streamline styling of the steam locomotive recognized the inherent power and strength that the engine symbolized to most people. Semi-streamlining was short lived in America, as full streamlining was close on its heels.

Dr. Oscar Tietjen of the Westinghouse Laboratories made studies in 1931 with train models in a wind tunnel. *Railway Age* picked up the news of his tests and quickly published his findings. "Railroad companies anticipating the future development of high speed trains," he commented, "should start now to build experimental trains." His finding reported that streamlining a locomotive with two cars saved 32 percent of its power at 75 miles an hour. As a result of this and other wind tunnel tests by a number of other engineers, an improved external shape for locomotives and cars began to evolve.

The advent of Union Pacific's *City of Salina* and Burlington's *Zephyr* was the ultimate happening in America. The streamliners' premiere was beautifully timed, appearing amidst a national Depression which had cast gloom over the land. Arriving felicitously in late 1934 and early 1935, the gleaming new trains offered glamour, optimism, and an expression of good times ahead. Quite naturally, Americans took immediately to streamlining as a symbol of the new America they longed for.

The streamline style had everything: not only speed, glamour, and excitement, but also the lure of distant cities and places to go. Inside as well as out, the streamliners were a delight. Instead of scratchy red plush, dark paneling and cinders and soot, there were modern interiors, air conditioning, soft reclining seats, seductively curvaceous stand-up bars, and pastel dining rooms, all bespeaking elegance. Soon the very names of the streamliners—*Zephyr*, *Flying Yankee*, *Comet*, *Super Chief*, *Mercury*—became household words, synonymous with modernity and luxury.

By the end of 1935, the first year of the streamline era, still more railroads acknowledged the necessity of adopting a streamlined appearance, at least on their principal passenger runs. In 1936 streamlined trains started running on several railroads anxious to have their own visible expression of

(Continued on page 72)

It is usually risky, and at best brash, to state that something, someplace or somebody is "the world's greatest . . ." but in the 1970s, Indonesia wins that title, without dispute, in terms of the great variety of size, type and age of the steam power operating on the *Perusahaan Negara Kerata Api*—the Indonesian State Railways. With the oldest active locomotives built in 1879 and the newest in 1967, with power

ranging from 0-4-0 enclosed tram engines up to 2-8-8-0 compound Mallets and such rare classes as 0-4-0 tender engines in passenger service and 2-12-2 tank engines, with everything conceivable in between, the PNKA locomotives of Java and Sumatra offer a show unrivaled in the world today and most incredibly, it would have been matched by few railway systems even 20 years ago!

With 88 years of steam locomotive technology to fascinate enthusiasts (indeed, the first steam locomotive in Indonesia, if it were still in operation, would be 108 years older than some still in service), the steam locomotive of Indonesia deserves to be on the list from whence only a few American, British, plus a sprinkling of European, railway photographers have



THE GREATEST COUNTRY

By Ron Ziel
Foreign Steam Editor

For those seeking plenty of steam activity in the 70s, Indonesia is the undisputed leader.

The first of the CC50 Class, CC50 01, built by Werkspoor in 1928 departs with an afternoon local from Tjibatu. Mallets comes in a variety of sizes on the islands of Indonesia.

Passenger depots are not the most imposing along the line, as can be seen at Belen as a mixed train slowly rumbles by.

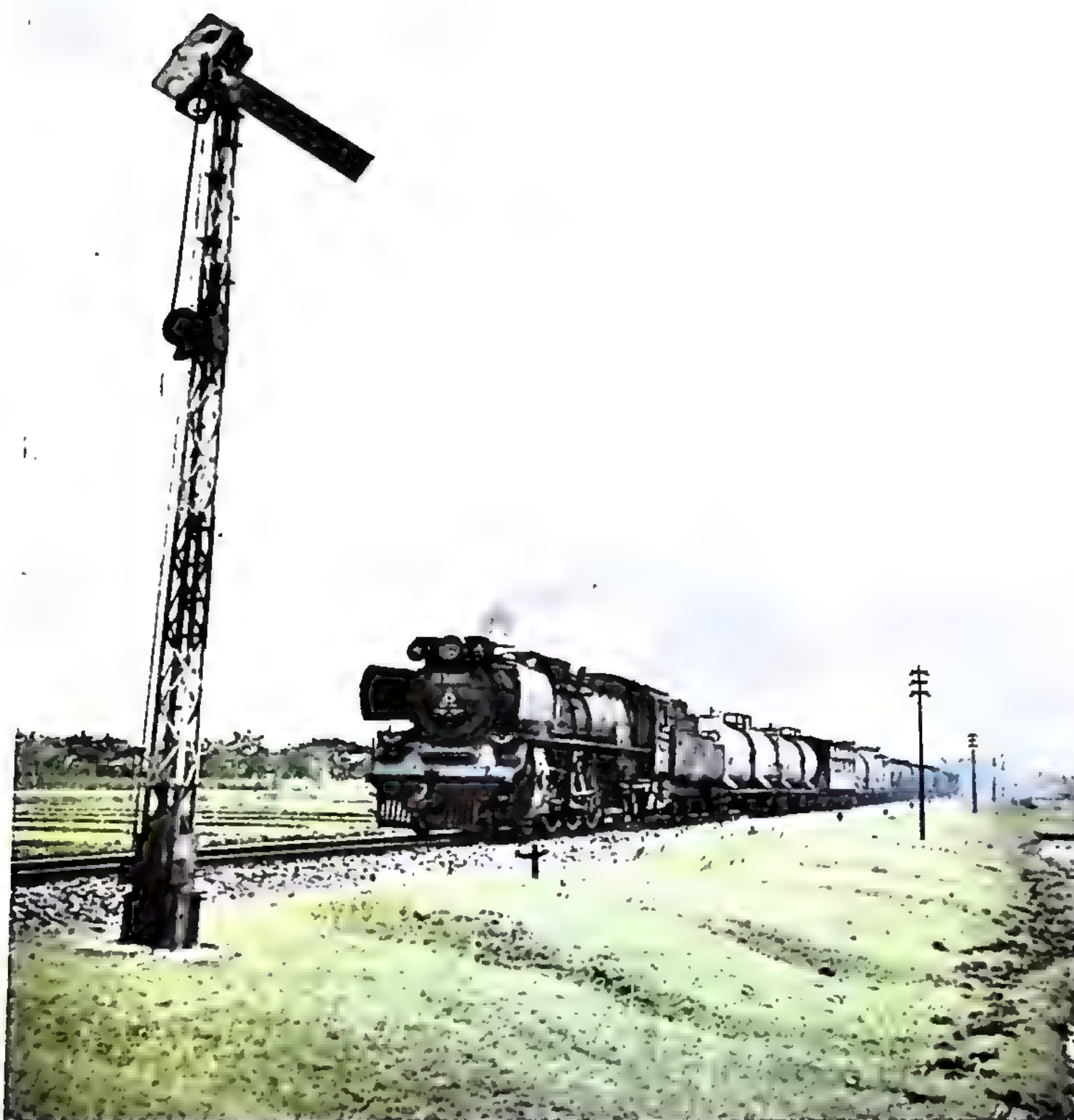
Steam tram loco B12 21 works in Wonokromo, just in front of the corrugated metal-roofed coaches. Local kids are yelling "Yan-Kee Pho-To" at author Ziel.

It is almost unbelievable that all fourteen of the Class B50 2-4-0s built by Sharp Stewart in 1885 are still in active service, but such is the case in the late 70s in Indonesia.



A Krupp built 2-8-2 is serving Sukomoro in December of 1973 with a long freight.

Typical of much of the steam power in Indonesia is this 4-4-2 built by Hanomag in 1902. Note fuel bunker fence to hold wood supply.



The clouds of grey smoke from the wood fuel drifts back over C2403, a 2-6-2T built by Werkspoor in 1908. Location is Jogjakarta, December 1973.

Built by Beyer Peacock in 1900, 0-4-0 B1221 is still in daily service with the Indonesian version of rapid transit.







Coolies cutting engine fuel at Tjepu, while the locomotive engineer takes a bath using warm water from injector, totally unconcerned he is being recorded by the American photographer.



The many different classes of steam locomotives still operating on the islands provide a paradise for the rail photographer. One such loco type is this 0-6-0 built by Henschel in 1926.

There is a great deal of German influence in the Indonesian railroading, from the Krupp built 2-8-2, to the very Germanic looking signal house.



ventured to the island-nation of the South Pacific.

Although rugged and primitive in places, Indonesia is basically comfortable to visit and all the larger towns have adequate hotels and restaurants. More important is the railway history: there are no restrictions on photography and indeed if a railroad policeman confronts a foreigner with a camera, it is to escort him around the terminal to assist him in his photography, even to the extent of pretending not to notice as the photographer momentarily turns his camera away from locomotives to focus on young women showering beneath the watering columns as they utilize the cool, clear water intended for the tanks of Krupp 2-2-8s and Sharp Stewart 2-4-0s!

Indonesians are very friendly and hospitable and the railway personnel do everything to ensure good photos, from making thick, black smoke and repositioning locomotives, to assisting with night flash photography. In fact, the only real problem, on occasion, as in many countries, is that hordes of local children always try to get into the picture, while chanting "Yan-kee Pho-to."

Getting around Java, which the author visited for nine days in December, 1973, is somewhat inhibited by the fact that there are no automobile rental agencies; not even in Djakarta, the capital. All long-distance travel is by the local airline or by railway. For lineside photography, one must rent a taxi. In many cases, a cab can be rented for several days, as long as the driver's hotel and meals are paid for, as well as the fare, which is usually reasonable for a foreigner willing to shop around for a rate of about \$25 per day, plus gasoline.

In nine days, one can barely scratch the surface of steam on Java, but with good prior planning, luck in making transportation connections and no major breakdowns, nine days was enough time to find at least one active example of most major classes of steam locomotives, but lineside action was limited. To really "cover" Java, including action, a trip of three to four weeks is in order.

Since the author's trip was quite a success and since there is relatively little change in steam activity and locomotive allocations from year to year, it may be best to run through Java from start to finish—from Djakarta in the west to Surabaya, the second largest city and a hub of all the main lines in the east—as was done on that journey two years ago.

After having spent over a week in Japan and nearly a week on Taiwan photographing locomotives, the author flew down to Djakarta, where he

landed the night of December 21st, 1973. Early the next morning, he set out by taxi to see the engine terminal at Djatinegara and over to Rangkasbetung, reportedly the best place to see the B51 class 4-4-0s, as well C27 class 4-6-4 tank engines. As usual, the reports in the *Continental Railway Journal*,* the British survey of contemporary worldwide steam activity, were correct, and the desired classes were at their appointed locomotive depot, sitting in the mid-day and afternoon sun and very photogenic, indeed.

(Since this journey, a railway photographer's Indonesian adventure should be greatly simplified by the publication of "PNKA Power Parade," by the renowned British steam photographer A. E. Durrant. In this big, illustrated 100 page book, which was published by CRJ, Durrant not only gives location of locomotive types but offers valuable hints on how to get around the island-nation as well.)

The numbers on PNKA locomotives include the class, as well as the road number. Class is determined by the number of driving wheels and a two digit number, then the road number. The drivers are designated by a letter; "B" for four driving wheels, "C" for six, "D" for eight, "E" for 10 and "F" for twelve. Thus No. B51 39 is a 4-4-0 of B51 class and is No. 39 of the series, while CC50 01 is the first of the 2-6-6-0s of CC50 class.

Next was a short flight to Bandung and a taxi ride into town. Just as the taxi got caught in a traffic jam consisting mainly of pedicabs, those reverse tricycle affairs in which a driver pedals several passengers around town, on the bridge over the railroad yard, a handsome 2-8-2T, No. D14 11 clumped onto a turntable just 10 meters from the bridge abutment. The taxi driver was ordered to halt right then and there, while the author grabbed his cameras from the trunk of the cab and began snapping pictures. An added attraction was the presence of a Thai railfan also touring the PNKA.

That same day, it was a few hours' taxi ride to the legendary Tjibatu, an engine terminal of modest proportions, with an allocation of fourteen locomotives. What makes this place so unique is the fact that every one of the engines assigned there, plus many that operate into the place, are Mallets! Tjibatu is probably the only mainline engine depot in the whole world to have an allocation entirely consisting of big compound locomotives powered by two sets of driving wheels.

The three major classes of Mallets to run on the 3' 6" gauge mainlines are all represented here with the fol-

lowing assigned: CC10 2-6-6-OT (7), CC50 2-6-6-0 (2) and the king of the PNKA, DD50 2-8-8-0 (5). There is an extensive shop for running repairs, so in normal times, Tjibatu is a busy place. Unfortunately, December, 1973, was not a normal time and this proved to be the only real disappointment on the entire Indonesian trip.

The "all Mallet" depot had nothing but the big four-cylinder steamers, but virtually all were in a state of disrepair, with missing parts and obviously had not run in a while. The English-speaking engine foreman, after giving the author two big brass builders plates which were removed from 2-8-8-0s on the spot, explained the situation. He was awaiting a mass of spare parts, due on ships from India and from England. The deliveries were a year late, so most of the Mallets had been cannibalized to keep a few in operation. Once the parts arrived, all would be put back in service.

Of the total of 74 members of the three classes, only about ten were in service, of which half were seen live. Even at other depots, such as Madiun, dead Mallets were seen, awaiting the shiploads of parts. Of course, the biggest disappointment was the fact that the twenty big U.S.-built Alco DD50 and DD51 classes of 1916 and 1919 respectively, were all gone and none of these 2-8-8-0s have been seen in several years.

Christmas Day of 1973 was barely discernible from any other hot, tepid equatorial day in the Javan jungles of the non-Christian nation of Indonesia. Only a few of the larger hotels which cater to westerners had a few decorations and few foreigners come to Tjibatu, where the author returned on December 25th, in hopes of getting at least some Mallet action. Fortunately, exactly one member of each of the three classes was fired up, with 2-8-8-0 No. DD52 03 switching in the sunlight and the prototype CC50, No. CC50 01, departing with a mid-day local.

The following day, after two hundred kilometers by taxi and a night in a reasonably passable hotel overlooking Jogjakarta railroad yard, several affable C24 class 2-6-2Ts and a veritable concentration of the big Krupp Mikados, 100 of which were built in 1951, as class D52, were photographed at work. The D52s are the most modern of the major classes and are very handsome machines. They are spread all over Java and are used on freights and some heavy passenger trains which have not yet been dieselized. 90 of the D52s are on Java, the remaining 10 in South Sumatra.

From there the taxi went to Ambawara, the depot for a section of rack

Continental Railway Journal information from L. King, 25 Woodcock Dell Ave., Kenton, Harrow, HA3 0NT, ENGLAND.

line, where a 1902 Esslingen 0-4-2T rack and adhesion engine, No. B25 01, was under steam and being "wooded up" by the hostler. Although the rack section is reportedly closed, the B25s still switch the terminal yard.

Some of the most delightful little locomotives in the world are allocated to Kudus, in north central Java. Here nine magnificent little 0-4-0 tender locomotives of the B52 class, built by Hartmann between 1908 and 1913, as well as a diminutive 0-6-0T, built by the same German firm in 1898, switch the yard and the four-wheelers tootle out of the terminal with passenger trains of four wheel chicken coops. The engines are painted black, with graphite smokeboxes, bright red pilot beams, main rods and trim and have enormous steam domes and stack caps of shining brass. All burn wood, as do most of the smaller PNKA classes (the larger engines are oil-fired) and putter about their chores.

The 0-6-0T, No. C19 10, would be worth a small fortune on the American tourist railroad engine market, being a diminutive woodburner of obviously rare vintage. After shuffling out of the terminal, she went to work in the yard, assembling a mixed train. The author conned his way into the cab through the usual devious trick of bribing the crew with postcard pictures of steam

power in the U.S.A. and the Soviet Union. The author took the throttle, to the surprise and apparent delight of the native crew, and began to make up the train, following the brakeman on the ground, as he moved from track to track, aligning the switches. Once the train was made up, the bogus Yankee engineer departed, to a round of backslaps and handshakes from a half dozen PNKA men.

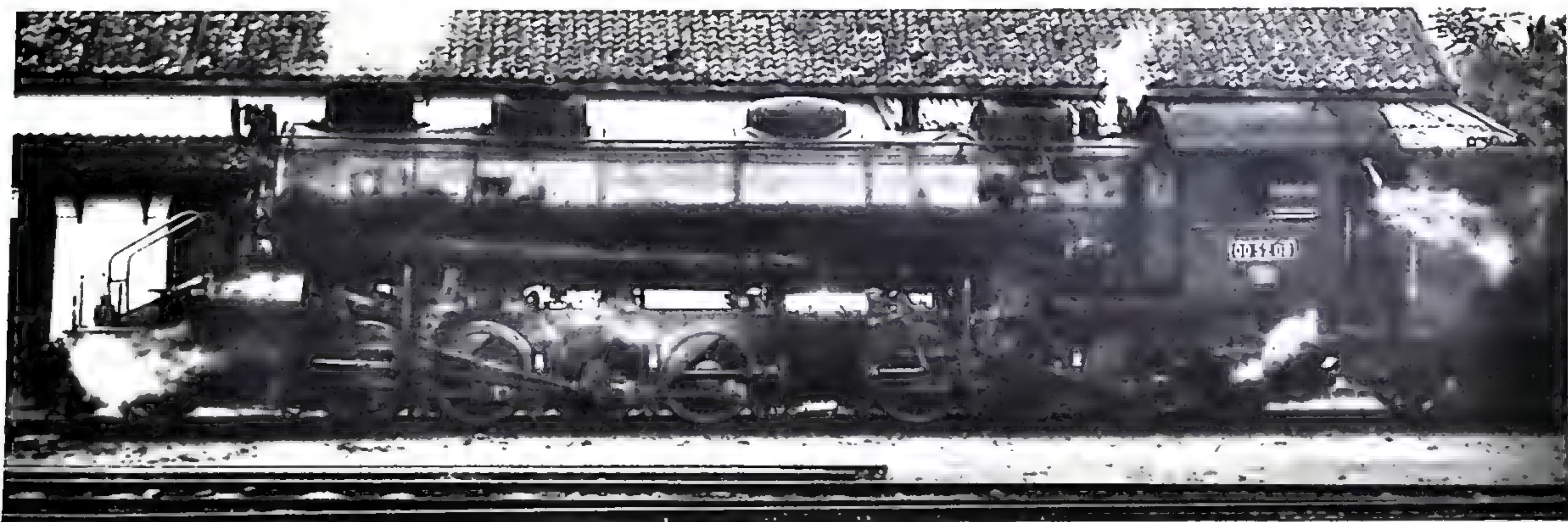
A train trip via second class coach, which was both clean and comfortable, brought the author to the big rail center of Surabaya and a very nice western-style hotel, which was the base of operations for the next three days, as he radiated out to the engine depots at Modjokerto, Pare, Kertosono, Babat, Bodjonegoro and Tjepu.

Surabaya itself has a large contingent of D52 class Mikados, D14 class 2-8-2Ts and little C11 class 2-6-0Ts as switchers. The C11s are the oldest class of tank engine on the PNKA, at least 55 having been erected by Hartmann between 1879 and 1891. Incredibly, for any place else in the world, but not for Indonesia, most of the class apparently survives and of the 46 on Java, at least 38 were still active as late as 1970. At Pare, the author photographed No. C11 13, built in 1883 and still 'huffing around the yard in her 90th year.

The Wonokromo steam tram depot is an experience to highlight any Indonesian trip. The main station and engine shed of the Surabaya steam tram line is in the suburb of Wonokromo, where the last half dozen of an original total of 46 diminutive enclosed 0-4-0T tram engines, built between 1891 and 1902 are stationed to operate a delightful service which runs from the docks, through central Surabaya and out to the country village of Kirangpilang. Operating most of the way on the shoulder of the paved road, the line served much the same function as a trolley line; hence the designation of "steam tram."

On December 27, 1973, No. B12 40 was switching the yard, while B12 21 pulled three ancient wooden dog-houses-on-wheels down the line, amidst the pedicabs, buses and trucks. Wonokromo itself has a formidable trainshed station which was being switched by 0-6-0T No. C26 04; a case of the shunter being larger than the road power!

Across several tracks from the station was the enginehouse, with nobody around except a rather attractive and well-built young woman of about 20, who was completely nude, taking a shower beneath the waterspout which normally quenched the thirst of the little tram lokies. With a horde of



This 2-8-8-0 was built by Werkspoor in 1924, and is one example of the many types of compound Mallets that are seen in service. These large class locomotives are oil fired.



This diminutive 0-4-4 is used for branchline passenger service. B52 04 was outshopped in 1908 by Hartmann.

local children who had just latched onto the author at the station, shouting "Yan-keo, pho-to," a few quick shots were made of the girl with a backdrop of tram engines, before she hastily completed her shower. Unlike the girl who was overexposed, the film turned out underexposed, but it is clear enough to outdo any travel poster in attracting steamfans to Indonesia!

The next day, December 28th, was perhaps the most successful, when from early dawn, 'til hours after twilight, twelve different classes of eight wheel arrangements, at four steam depots and between, were caught live by the cameras. The highlights were a 2-12-2T at Kertosono and the yard at Madiun, where many engines come and go, and nine of the B50 class are based. Two of them, Nos. B50 06 and B50 14 were found operating around the yard. These 2-4-0s are the oldest tender locomotives running on the PNKA. One of the most incredible locomotive facts on record is that, as far as is known, the entire class of B50s, built by Sharp Stewart between 1880 and 1895, is still in service! The oldest is now 95 years old and the youngest is 90, but all are known to be chuffing around Java.

Madiun is also a good center for the B53 class of 4-4-0s; which are larger

and more modern than the B51s at Rangkasbetung. Modjokerto featured another 2-4-0 class in the form of No. B13 10, built by Hanomag in 1885, as well as a relatively young switcher, 0-6-0T No. C26 09, a 1926 Henschel. At night, two B53s lined up with the C26 for flash shots.

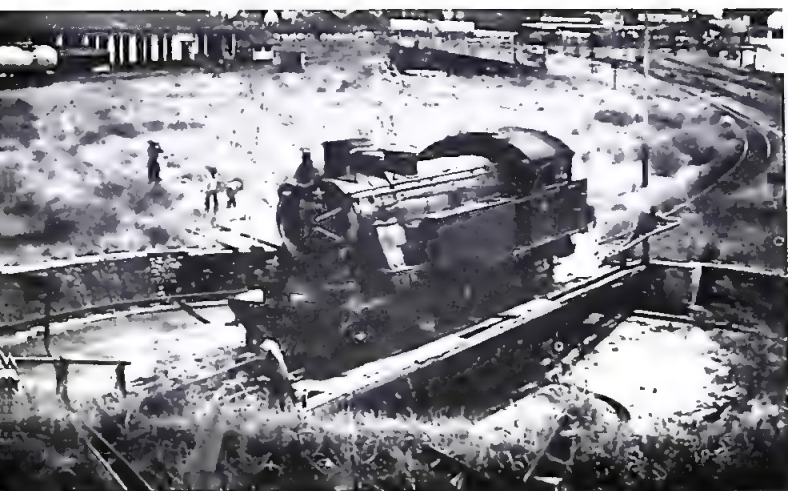
The area around Bodjonegoro and Tjepu was visited on December 29th and more of the light B51 class 4-4-0s were found, as well as the C51 4-6-0s; the latter being renowned as perhaps the cleanest and shiniest locomotives on a railway that boasts many exemplary appearing engines. After that, it was back to Djakarta on December 30th and by New Year's Eve the author was in Thailand, photographing World War II Japanese Moguls crossing the Bridge over the River Kwai.

Java had offered an infinite variety of steam power with just a few disappointments, including the fact that the last of the two classes of Pacifics which had totaled 34 engines had been withdrawn the previous year, since diesels had taken over the mainline expresses. There was justice in the fact that with the diesels, the schedule between Surabaya and Djakarta had been lengthened by two hours! The relatively new 4-6-2s, built in the teens and twenties, were seen rusting away in 1973, even as little

kettles forty years older worked nearby.

A return trip to Indonesia, including Sumatra, is planned in a year or so, when at least a month can be spent in this fascinating country. In recent years, new diesels have been arriving at the rate of only ten annually and the active steam engine stock on PNKA has dropped from 600 in 1971 to 540 in 1975. The earliest date advanced by the railway management for the end of steam is about 1990. While that fact may encourage steam enthusiasts to take the urgency out of a planned trip, some of the best classes may disappear at any time. This writer only missed the Pacifics by a year; that should be a lesson.

Of the best remaining steam countries in the world, Poland, Turkey, Argentina, China, India, South Africa and Indonesia, only South Africa is more accessible and less dangerous to the railway photographer than is Indonesia. Recent political events have rendered once-enticing Argentina and U.S. ally Turkey, less than hospitable, as is India. China and Poland, like all Communist countries, present unique and to most photographers, insurmountable problems. Indonesia may be primitive and the services spartan, but the variety of steam power makes it all well worth the problems and the expense.



The tracks seem to have their own ideas about how they should get to the turntable at Bandung. Man with camera is a visiting railfan from Bangkok, Thailand.

With plenty of wood on board for her journey, C28 48, "Dhoho" ("My Country") prepares to hook onto her train for the trip from Kertosono.



The "all Mallet" depot at Djibatu was a bit of a disappointment for the author, as most locomotives were down for repairs, awaiting the next boatload of spares.



A Photographer Looks Back WAY OUT WEST



UNIQUE SP . . .

On a railroad that was noted for steam power individuality, nothing was more uniquely Southern Pacific than the railroad's cab-ahead articulated design. I venture that few who experienced the sight and sound of them would disagree with the statement that an SP cab-ahead was among the most unforgettable of steam locomotives. Of some 282 SP articulateds built over a 35-year period, all but 26 were either built or later rebuilt as cab-ahead, oil-burning units. Class AC-8 4-8-8-2 No. 4201 dropped downgrade through Santa Susana Pass scenery in August 1950, heading for the last lap across the San Fernando Valley with an eastbound Coast Line extra. Delivered in 1939, the 4201—like every other SP cab-ahead—was built by Baldwin.

E1A'S AND THE "SAN DIEGAN" . . .

The familiar bulldog-nose profile that was to characterize more than a quarter century of EMD diesel-electric locomotive production first appeared in the late 1930s on passenger units built for B&O, Santa Fe, and the Rock Island. Santa Fe's eleven 1500 hp E1s of 1937-38 powered the crack *SUPER CHIEF* for a decade, and then took up duties on the *SAN DIEGAN* streamliners until they were returned to LaGrange for remanufacture into 2000 hp E8Ms in 1953. Back-to-back E1As sped through Carlsbad, California, in August 1950 with northbound No. 73, a mid-day San Diego-Los Angeles *SAN DIEGAN*.

By William D. Middleton

The railroads of the American West have always been described in superlative terms, and with good reason.

"CALIFORNIA ZEPHYRS" IN GLENWOOD CANYON . . .

The celebrated *CALIFORNIA ZEPHYR* was "scheduled for scenery," and some of the journey's finest was experienced during the train's all-day run through the Colorado Rockies on the Denver & Rio Grande Western. Seen from the vantage point of a front row Vista Dome seat in the CZ's rear end observation-lounge, the westbound *ZEPHYR* met its opposite number beneath towering cliffs of Glenwood Canyon on the Colorado River in September 1955. Alco PAs powered the eastbound CZ.

The men who built the Western railroads contended with distances that were greater, with mountains that were higher, with a topography more rugged, and a climate more severe than those which were normally experienced back East, and the mastering of this environment demanded some extraordinary feats of construction.

This hostile environment of the Western railroads has been no less demanding of the men and machines that operate them than it was of those who built them. The modern steam power built for Western roads was typically among the largest and most powerful built, and in more recent years the Western lines have often broken the ranks of motive power uniformity that followed the conversion to diesel power with ventures into such unorthodoxy as gas turbines, imported diesel-hydraulics, and custom-built

diesel-electrics incorporating as much as 6600 hp into a single unit.

In the streamliner era that began in the early 1930s, the Western roads were always among the leaders. UP's 1934 *City of Salina* was a *Zephyr* contemporary, and the Union Pacific's great fleet of *Cities* streamliners pioneered the concept of the modern "cruise ship" train that reached its ultimate expression in such trains as the *California Zephyr*, the *Empire Builder*, or the *North Coast Limited*.

The great steam locomotives of the West are gone now, and the colorful variety of the Western streamliners has been replaced by the uniformity of Amtrak. But the eternal battle of the Western railroads with distance, and topography, and weather goes on, and because it does, the Western railroad scene remains one of continuing fascination.



SANTA FE IN CAJON . . .

One of the most satisfactory diesel locomotive color schemes ever devised was the red, yellow, and silver "warbonnet" design that graced Santa Fe passenger units more than three decades. A late afternoon sun backlit the brilliant colors of a 1950s-era, passenger-gear F7 in January 1954 as the diesels headed a westbound mail and express train across Cajon Creek at Devore. Steam survived on Santa Fe's secondary main line passenger schedules into the early 1950s. With stack extension raised, 4-8-4 No. 2921 stormed up the 2.2 percent grade to the Cajon Summit in September 1950 with the third section of eastbound No. 24, the Los Angeles-Chicago GRAND CANYON. The big 4-8-4 was one of 30—the biggest and last Santa Fe Northern's—built by Baldwin in 1943-44. Santa Fe's favorite "first generation" diesel was the EMD unit; by 1954 more than 900 FT, F3, and F7 units were operating in Santa Fe freight and passenger service. No. 208, a four-unit F7, headed eastbound freight up the west slope of Cajon near Alray in November 1950.





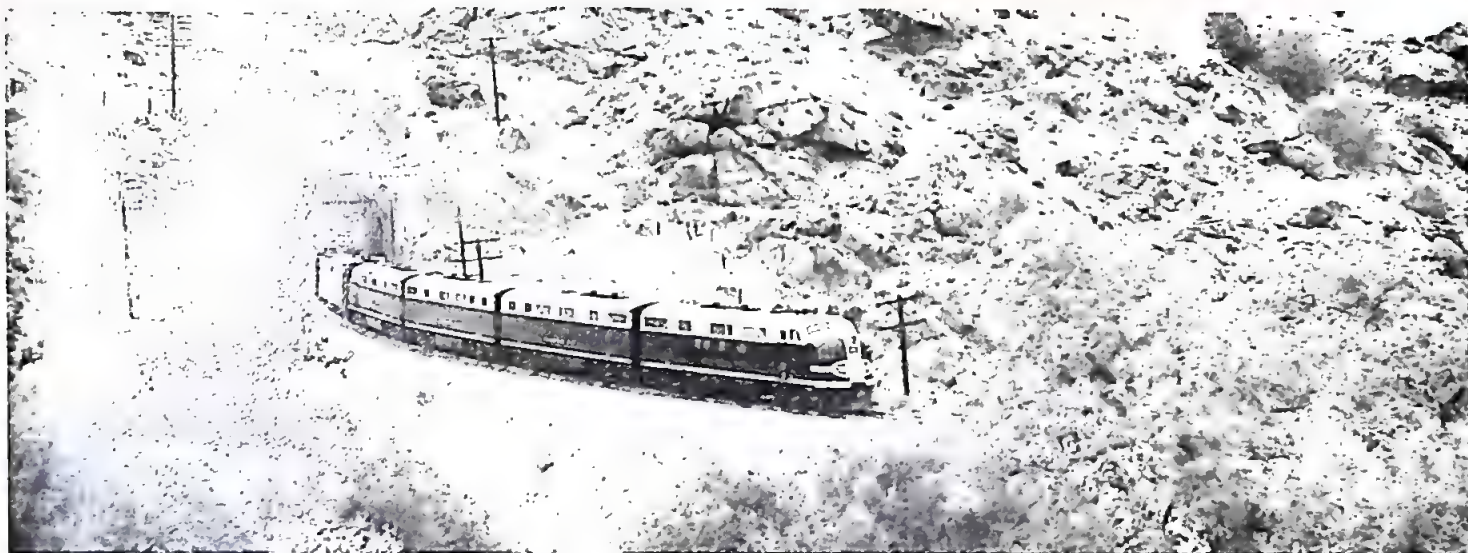
UP ALCOS HEAD BACK EAST . . .

When Union Pacific began the wholesale dieselization of its western lines during the late 1940s the greater share of its motive power orders went to GM's Electro-Motive Division, but American Locomotive, then EMD's principal competitor, got a sizable share of the business, too. By the end of the 1940s the Schenectady, N.Y., builder had delivered more than a hundred road freight and passenger units to UP, and the distinctive flat-nosed Alcos became regular visitors to the rugged grades of California's Cajon Pass. Aided by a pair of GP-9 helpers, a trio of Alco PA-1 and PB-1 units struggle up 2.2 percent grade just below Alray with the 14 cars of eastbound No. 10, the CITY OF ST. LOUIS, in January 1954.

THE "GRAND CANYON" AT TEHACHAPI CREEK . . .

The combination of Alco's boxy-nosed post-war PA passenger units and Santa Fe's striking "warbonnet" colors produced what were easily some of the handsomest diesel units on anyone's railroad. Late on an autumn afternoon in 1950 this PA-PB-PA combination came burbling across Tehachapi Creek on the way up the arduous north slope of Tehachapi Pass with the eastbound San Francisco section of Santa Fe's GRAND CANYON, a service that vanished a few years later with the inauguration of the SAN FRANCISCO CHIEF.





ON THE HILL AT TEHACHAPI . . .

The Southern Pacific's route through Tehachapi Pass, shared with Santa Fe, affords a gateway between the San Joaquin Valley and the East that is one of the railroad wonders of the West. Tehachapi's northern slope is a spectacular combination of tunnels, curves, two percent-plus grades, and the famous Loop, that is seldom silent of the thunder of ascending tonnage. On a June day in 1954 four Santa Fe EMD F3 units (above) apply 6000 hp to the head end of eastbound freight emerging from Tunnel No. 8 below Keene on the long, 2.52 percent climb to the summit. Four Southern Pacific F7 units (below) have just emerged from Tunnel No. 9 at the bottom of the famous Tehachapi Loop with 1st-806 in this October 1950 photograph. In just a few moments the motive power will complete the circuit of the Loop to cross over its own train on the trackage above the tunnel.

THOSE "DAYLIGHT" 4-8-4'S . . .

Assuredly the most famous of all 4-8-4's were the Southern Pacific's 50 streamlined DAYLIGHT Northern, and surely these striking red, orange, and black GS series engines were among the most handsome of 4-8-4's as well.

The "yellow jackets" were stripped of their DAYLIGHT colors in steam's last years, but for all that they remained strikingly handsome brutes just the same. Proof of the latter point was de-streamlined GS-4 No. 4449, accelerating the eastbound SAN JOAQUIN DAYLIGHT away from a Berkeley station stop in October of 1955. Some two decades later the 4449 would enjoy a position of rare distinction, restored to her original splendor and back in steam at the head end of the American Freedom Train.



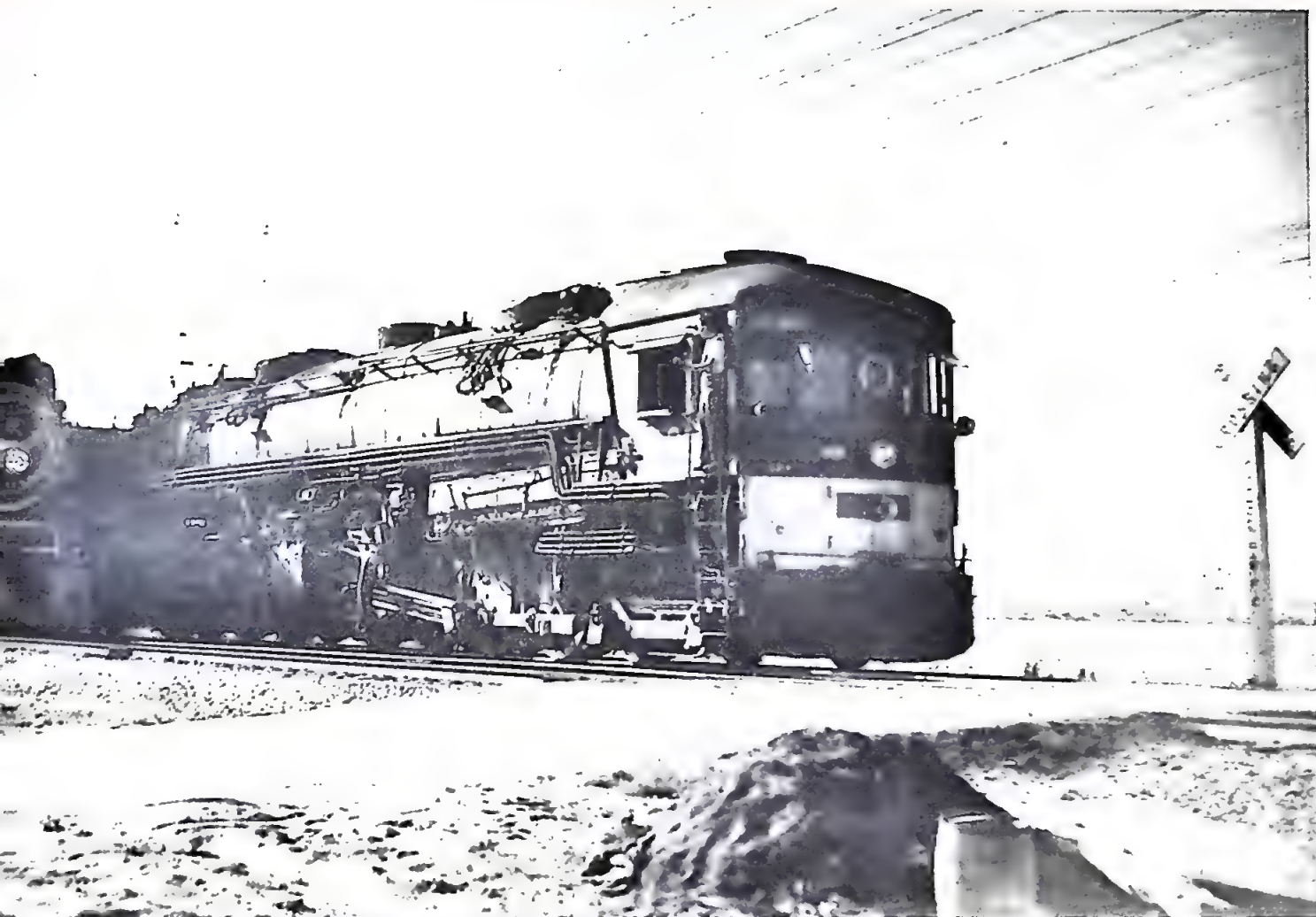
COAST LINE MEET AT OXNARD . . .

Two of Southern Pacific's most notable steam locomotive types met at a Coast Line siding just east of Oxnard, California, in 1953. Cab-forward No. 4198, an AC-8 class 4-8-8-2 built by Baldwin in 1939, has taken siding with eastbound freight No. 830. Soon an air horn honk from the west signals the approach of eastbound No. 98, and then a great DAYLIGHT 4-8-4 comes racing out of the late afternoon sun with the COAST DAYLIGHT'S splendid train of red and orange. Northern No. 4458 was one of only two rollerbearing-equipped 4-8-4's, built by Lima in 1942 as SP's class GS-5.

PENINSULA COMMUTER IN STEAM . . .

Between San Francisco and San Jose Espee operates the only significant rail commuter service west of Chicago. Unit diesels and gallery cars arrived in the mid-1950's, SP's Peninsula commuters were pulled by hand-me-down main line steam and rode in arched roof coaches of Harriman period vintage. Typical of Peninsula commuter runs in the steam era was No. 122, an afternoon rush hour San Jose run photographed in February 1951. Class Mt-1 Mountain type No. 4311 was one of SP's first twenty-eight 4-8-2's, built by Alco in 1923-24.





EASTBOUND "SKUNK" . . .

Running 40 miles through splendid scenery in the Northern California redwood country between Willits and Fort Bragg, the California Western RR is a logging road and lumber carrier that has found fame and fortune as a tourist line. Black and yellow "Skunk" motor car No. M-300, running as Fort Bragg-Willits train No. 5, rattles eastward beside Pudding Creek not far from Fort Bragg in July 1969.

Would you believe Pacific Electric? This car operated on a narrow gauge line atop Mt. Lowe near Pasadena. The Alpine division lasted until 1938.



SLIM GAUGE ELECTRICS

Narrow? Yes. Small? Not necessarily!

By Van Court Wilkins

Photos by Stephen D. Maguire
except as noted

Narrow gauge was little engines and big men over the Continental Division, the Slim Princess in California's Owens Valley, and lumber roads across the United States. It continued in a useful role over White Pass between Alaska and Canada and in Newfoundland. But narrow gauge was also over a thousand miles of electrified track and 2500 cars. It was multiple unit trains in Massachusetts, midwest-style interurbans in South Dakota, steeply cab locomotives in Colorado and California, basic transportation in major cities, and a convenience in smaller ones. The first major trolley system to be abandoned was narrow gauge, as was one of the last.

But why narrow gauge traction at all? General Palmer built the Denver and Rio Grande to a width of three feet, because in the mountains of Colorado it was much cheaper. This wasn't a factor in cities, where expensive cuts, fills and rock work were not needed, and where a standard gauge trolley could climb as steep a grade or negotiate as sharp a curve as a narrow gauge one.

Narrow gauge seems to have been chosen simply because it was there. The existing horse or cable lines were built to a gauge less than standard, and it was easier and less costly to electrify using track already in place, even though eventually complete rebuilding was necessary. The large systems in Los Angeles, Portland, and Denver all used the existing 42-inch cable car gauge. The 48-inch gauge used in San Antonio, Pueblo, and Springfield, Ohio was a carryover from horse car lines. The common steam road gauge of three feet was retained when the Boston Revere Beach & Lynn, the Deadwood Central, and the Pacific Coast Railway electrified.

Narrow gauge lines used much the same technology as those of wider width. Car builders supplied trucks of standard designs but with narrower frames. There were instances where narrow gauge cars were sold to standard gauge companies and vice versa. Conversion was accomplished in at least one instance by merely using wheels of a slightly different contour. In other instances regauging of wheels, rebuilding of trucks, or a complete truck change was required.

Car bodies were generally of normal dimensions, though frequently of distinctive design in the early years. One system—Portland—had a practice of switching car bodies from one gauge to the other as the need arose. Cars built in company shops were used in Los Angeles, Portland and Denver. Where equipment modernization took place, standard designs such as Birneys, Brill Master Units and PCCs were usually used. Los Angeles



Los Angeles Ry. 58 was one of the 183 Type "C" cars, reputedly designed to save embarrassment to ladies in hobble skirts. Known as "sow-bellies," some were built new by St. Louis Car Co., and others were rebuilds of older cars done in the company shops.

Denver Tramway .04 was originally standard gauge and took this number when it was converted to 42-inch track. These cars ran in interurban service until 1950.



LARY 1277 typifies the final refinement of the "California" open-and-closed car design. St. Louis Car Co. built 250 of these steel, multiple unit-equipped Type "K" cars in the early 1920s. LARY constructed 60 more as Type "Ks" in their own shops, but these had wood bodies and steel underframes.

Los Angeles Rwy's "Huntington Standards" were designed with the mild climates in mind. The combination open/closed car was developed in the early 1900s and ran on 42" gauge track. Donald Duke collection.





was the exception, buying and building cars in the 1920s of their high platform, open and closed "California" type.

Complications arose when a company operated both standard and narrow gauge cars, or when standard gauge interurbans sought entrance to downtown areas where city cars were narrow gauge. The usual solution was mixed gauge three-rail track, making for especially complicated arrangements at turnouts and crossings, but in some instances completely separate lines on different streets were used.

In the early 1900s there were over two dozen slim gauge electrics providing public transportation. By 1920 most had either converted to 56½ inches or had been abandoned as economic failures. About 12 remained.

Los Angeles had the largest system and the longest lived. Operating nearly 400 miles of track and well over 1000 cars at one time, it was among the largest city systems of any gauge in the country. It shared dual gauge track and for a time common ownership with the Pacific Electric interurbans. To do justice to it in an article of this length would be impossible, but fortunately there have been excellent descriptions elsewhere. Several points are worth noting, however.

Los Angeles Railway was famous for

its "Huntington Standards"—a deck roofed combination open-and-closed car developed in the early 1900s and well suited to the mild climate. Known elsewhere as the "California" type, the arrangement was of obvious cable car ancestry and was continued into the 1920s in later car acquisitions. The only exceptions were 70 Birneys, the 165-car PCC fleet, and a few experimentals. LARY was one of the transit companies to sponsor the development of the PCC car, and its purchases represented the only narrow gauge version to run in the U.S.

The system was largely intact at the start of World War II, but was sold to National City Lines in 1945. Large scale conversion to bus operation began, but a final 40 PCCs were also acquired. By 1958 only the PCCs were left, operating on five lines. Finally, in 1963 the Los Angeles Metropolitan Transit Authority abruptly ended all electric service. The PCCs themselves were not scrapped, but were sold for use on the narrow gauge system in Cairo, Egypt. This was not the first time that Los Angeles cars went overseas. Earlier, surplus conventional cars were sent to Korea.

Even the Pacific Electric had a short segment of narrow gauge. High atop Mt. Lowe, its hairpin curves and 7% grades lasted into the 1930s.

California was the site of several other very small but unusual operations—all of three-foot gauge. One was the five-mile Watsonville Transportation Co. connecting Watsonville with a deep water pier on Monterey Bay. It hauled freight trailers with its two passenger motors and was notable for having an interchange with the steam operated Pajaro Valley R.R. This was little used, except when the WTCO wanted to borrow a car, since the Pajaro Valley had its own port. Hopelessly uneconomic, the line lasted only until 1913.

What was perhaps the only 3-foot gauge city system in the United States developed in San Jose. It didn't last long, however. In the early 1900s a process of consolidation took place which resulted in widening to standard gauge, track extensions, and finally sale to the Southern Pacific R.R. One element, a former steam dummy line electrified in 1901, remained narrow gauge. Using some trailers converted to electric operation and some deck roof city cars, it continued to operate into popular Alum Rock Park, until much of its line was washed out in a flood in 1911. A new standard gauge line of the S.P.-owned Peninsular Ry. replaced all but a one and a half mile segment, which continued to run until 1920.

It is April, 1933, and the "Lone Star" flags tell us that it is San Jacinto Day celebrating Texas' independence from Mexico. It is also the last month of operation for St. Louis-built 509 in San Antonio, although it will run until after World War Two in New York City. John K. Kight photo.

Portland Traction Brill Master Units eight and a half feet wide strive to emphasize the narrowness of 42-inch track.



Southern Colorado Power Co. Birney 131 shows its age in Pueblo, Colorado. These cars originally ran in Colorado Springs and were converted to 48-inch gauge. Note the unusual grab handle for errant pedestrians.



Home-built Denver Tramway's 1111 in the outskirts of Denver. This locomotive and five sisters (three standard gauge) went to Chile in South America after abandonment. The barely visible caboose is also homemade—a horsecar body mounted on a flat. Intermountain Chapter, NRHS.

The Pacific Coast Ry., a steam operated 3-foot line, built and electrified a new branch near Santa Maria to haul beets to a sugar factory. The first engine, the E-1, was built in the company shops using among other things the cab and lead truck of a steam locomotive which had blown up the year before. This was followed by the E-2, also a homemade steeple cab. Then in 1909 another electric branch was completed, this one to carry passengers from Santa Maria to the Southern Pacific depot in Guadalupe. Service typically was provided by the E-1 hauling an aged combine, with the E-2 doing the chores with the sugar beets. A steel interurban combine arrived from the Cincinnati Car Co. in 1912, discouraging the competing standard gauge Santa Maria Valley R.R. (steam) from instituting passenger service. By the mid-20s the sugar factory closed and passenger traffic vanished, and electric service ceased in 1928.

The third largest narrow gauge system was in Portland, Oregon. The long-lived interurbans have been the subject of much writing; the city system has been featured only once. Yet the city lines were unusual in a number of ways. This was the only U.S. operation with substantial amounts of both narrow and standard gauge city trackage. About 80 route miles were 42-

inch and 25 miles of the wider width (not including the interurbans). It ran until abandonment largely with cars acquired in the early 1900s—some home built. The only modernization was in the form of 25 Birneys in 1918 and 15 Brill Master Units in 1932. Despite a general lack of knowledge of the system, one line—Council Crest—was quite well known for its specially equipped Brill Semi-Convertibles with magnetic track brakes necessary to cope with the 12% grades on this line.

Some types of car body were considered interchangeable as far as gauge was concerned, and from time to time the company would change trucks to take care of a car shortage. Standard and narrow gauge cars were numbered in different series, so a number change accompanied each swap. This has been a source of frustration to persons attempting to reconstruct an all time city car roster.

By the start of World War II the standard portion of the city system was completely replaced with trolley coaches, along with some narrow gauge lines. Following the war, abandonments continued. Council Crest lasted until the end in 1950. The interurbans, however, lasted for another eight years.

Before we go eastward in the U.S., we must go 2000 miles into the Pa-

cific to Hawaii, where the Honolulu Rapid Transit and Land Co. ran 34 miles of 48-inch track. The company had some Duplex Convertible "barrel" cars at one time; but as the climate would lead one to expect, open cars were popular. There were some enormous 15-bench opens among the 60-plus cars. By the 1930s both cars and track were wearing out, and the last cars were replaced by trolley coaches in 1941.

Colorado, the capital of narrow gauge steam, had an electric system second only to Los Angeles and three smaller lines as well. The local lines of the Denver Tramway Co. and the integrated Denver & Northwestern interurban to Leyden and Golden made up 160 route miles of 42-inch track with well over 200 cars. There were also 120 passenger trailers manned by students of the University of Denver (nicknamed Tramway Tech) available for rush hour service until the early 1930s.

The affiliated Denver & Intermountain and the unaffiliated Denver & Interurban, both standard gauge electrics, entered downtown Denver over Tramway tracks. The Tramway built a standard gauge line to accommodate the latter, converting several cars to the wider track to provide local service. When the D. & I. later switched its terminal to the Denver

As an economy measure the Boston Revere Beach & Lynn secured four of these cars from the Eastern Massachusetts Street Ry. and mounted them on three-foot gauge trucks for evening "owl" service when MU trains were not justified.

Burlington System combine 12150 and 12150 mates were the only typical Midwest style narrow gauge interurbans. This spot in Lead, South Dakota was a favorite place for posing photos both before and after electrification.



Union Station, this line and a branch of the standard gauge Denver & Intermountain were rebuilt to conform to the rest of the city system.

Like Los Angeles, the cars were distinctive. Most were built locally by the Woeber Carriage Co., and some were later built by the Tramway itself. Surprisingly for a city a mile high with cold winters, at first cars had an open and unheated section. Some cars with this feature survived until 1945! Among

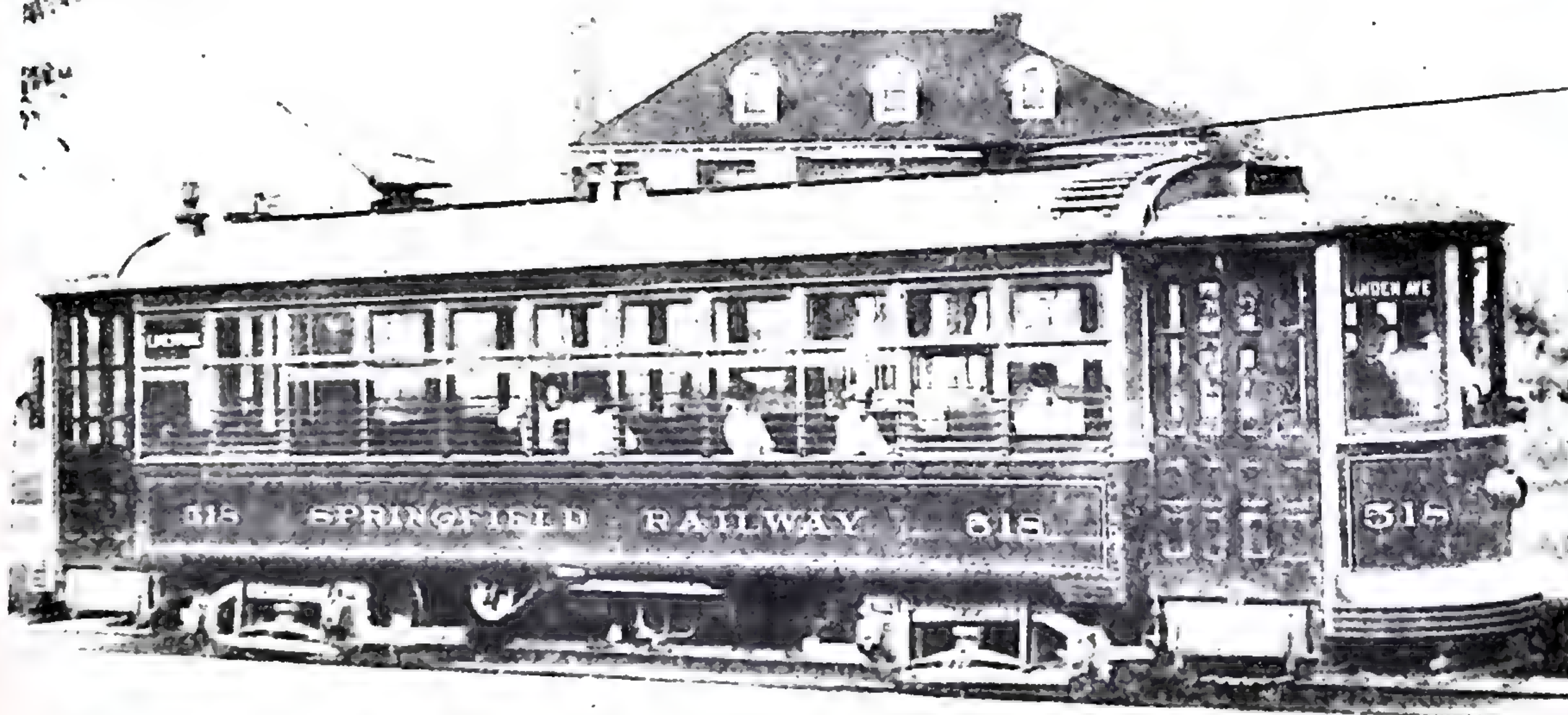
the non-Denver cars were 20 built by Brill in 1891 to the California pattern of closed center and open ends, but these were later closed in.

The narrow gauge interurbans followed the unique practice of numbering cars with decimals. Possibly car .01 was the lowest numbered traction car anywhere. City cars of whatever gauge and wide gauge interurbans all used whole numbers.

The Leyden interurban was mainly

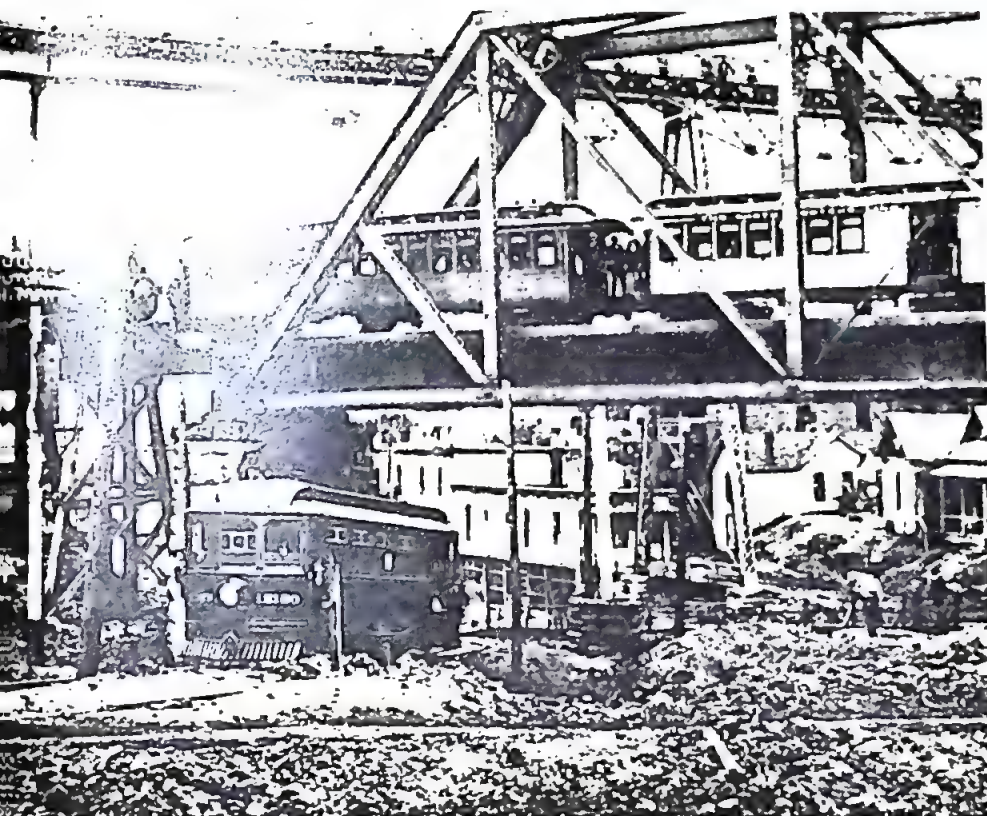
a coal hauler, using home built steeple cab locomotives. Part of the line was laid with dual gauge track, allowing interchange of standard gauge coal cars with the Colorado & Southern. The line's principal purpose, however, was to handle coal for the Tramway's own powerplant in Denver. The other branch of this line provided passenger service to the city of Golden.

Conversion of this extensive system to rubber tires started before World



This Stone & Webster-design "Turtleback" was one of twenty in Springfield, Ohio. These were probably the only cars of this design to run on narrow gauge rails.

Portland Traction 506 was specially equipped with magnetic track brakes for the steep grades on the famous Council Crest line.



War II, but was not completed until 1950. The interurbans were the last narrow gauge lines to run. It has been reported that the company considered but rejected the use of PCCs on two heavily traveled city lines. Trolley coaches were selected, instead, and even these lasted only five years before yielding to diesel buses.

A related short line, the Denver & South Platte, operated its four miles for a time with Denver Tramway equip-

ment, but eventually bought two Birneys—the only ones in Denver. After abandonment in 1925 they went to York Utilities in Maine and are now at Seashore Museum.

At Pueblo, the Southern California Power Co. had a 35-mile local system on 48-inch track. This little known operation began with horse cars and was electrified in 1890. Local historians hold that this was the second city west of the Mississippi to have electric

cars. At least three other cities, whose first installations predate Pueblo, all claim to be first, however. Following use of some cars similar to the Woerber cars in Denver and some conventional PAYE cars from the East, Birneys were acquired in the 1920s. More came from the Colorado Springs & Interurban in 1933. These were standard gauge, and regauging was required, reportedly by narrowing the gauge of the wheels and making no other changes in the trucks. The system lasted until shortly after World War II.

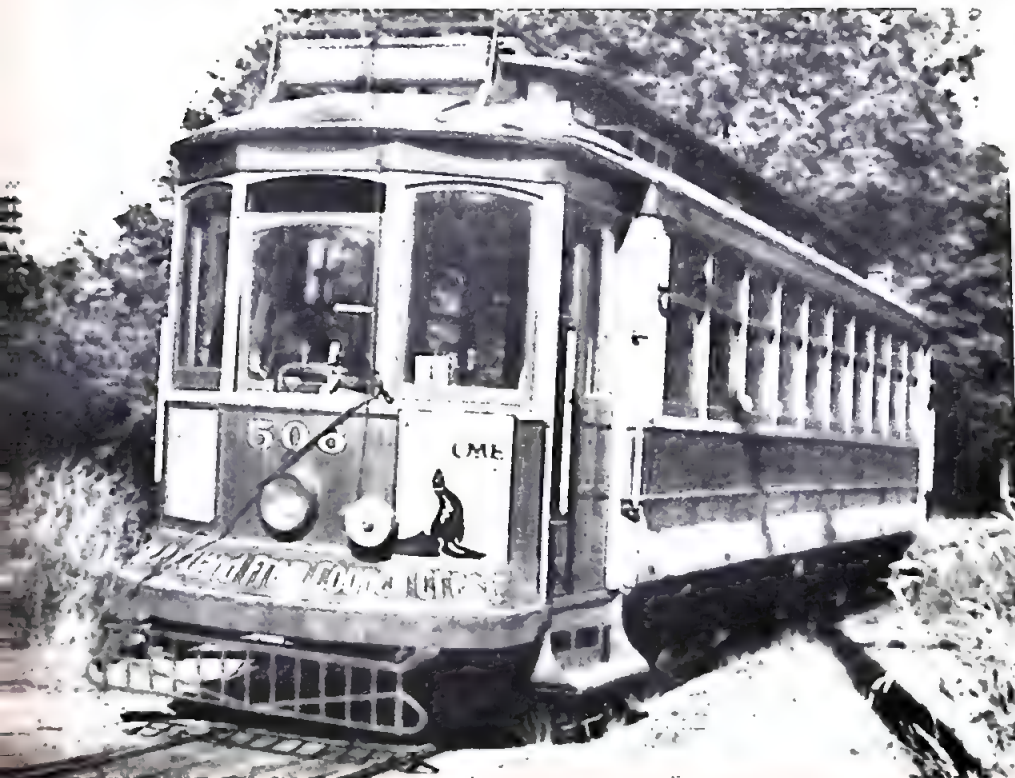
North of Denver in Boulder, there was a six mile system of 42-inch gauge operated by the Public Service Co. of Colorado. Modernized in 1917 with American Car Co. light weights similar to Birneys, the system was abandoned in 1931.

Texas would seem an unlikely spot for narrow gauge, but there were two systems on 4-foot track which lasted into the thirties. Several other lines built to the same gauge were converted to standard early in the century.

For a very small system, the Laredo Electric and Railway Co. was remarkably long lived. Laredo was one of the cities claiming to be first west of the Mississippi with electric cars, based on its December 1889 start date. Passing through several owners, it was modernized in the mid-1920s with eight single truck cars from St. Louis and from Corpus Christi and Marshall, Texas. Surprisingly, trackage was increased from two to six miles at the same time.

This little property had two other claims to fame. For a few months in 1900 it operated an international line into Nuevo Laredo, Mexico, and it had the distinction of operating what is said to have been the only funeral trolley in Texas. The death of an important personage of the city caused suspension of regular service so that sufficient cars were available to carry the crowds to the cemetery. Finally in 1935 operation ceased.

To the north, the San Antonio Public Service Co. was another story. With nearly 100 miles of track and over 200 motor cars and trailers, this was a major system in the largest city in the state. Its significance in the history of urban transit lies in the fact that in 1933 it became the first major city to convert completely to bus operation, thereby establishing that cities of over 200,000 did not need to retain street railways. The reason for this early abandonment lay in the actual and projected growth of the city. Street widening and straightening projects and anticipated need for extensions would have made necessary construction or relocation of much trackage. With thermit welded track costing up



to \$100,000 per mile, the decision was taken to abandon.

In the early years of the century equipment consisted of a fairly orthodox collection of double track monitor and arch roof cars. Later came Birneys and large single truckers—the latter on Radiax trucks. Finally in 1925 the company received 20 double truck, light weight cars from St. Louis. When abandonment came these nearly new cars were sold to the Third Avenue Railway System in New York, where they ran until after World War II. Company veterans say that gauge conversion was accomplished with replacement wheels of a special cross-section which provided the added 4¼ inches per wheel needed to achieve standard gauge.

In the Black Hills of South Dakota there was a three-foot gauge electric line unique in a number of ways. Its corporate title was the Deadwood Central R.R., but it was operated as an integral part of the Burlington system. Beginning as a steam road, the line shared part of the run with both narrow gauge electric equipped with typical midwest style interurbans.

Beginning in 1902 these dark green, railroad roofed cars, lettered for the Burlington and sporting five-digit numbers, ran between Deadwood and Pluma over three-railed Burlington track and then struck off on their own up Gold Run Gulch to Lead on grades that reached 8%. On holidays two-car trains were in order, but business fell off, and the line was abandoned in 1924. This was accomplished only after suitable deliberation by the Interstate Commerce Commission on the effect that cessation of operations by this four-mile trolley might have on interstate commerce, the second case of interurban abandonment considered by the Commission.

East of the Mississippi narrow gauge was scarce, with only two lines running in the period considered here. One was the Springfield (Ohio) Railway. Here was a typical small city system, except that it was of four-foot gauge. Springfield was the hub of six interurban routes, but none shared the local system's tracks. Rather than use a third rail, additional tracks were laid by the interurbans, sometimes in the same street. This on occasion caused other vehicles to face two electric cars bearing down on them side by side on separate tracks—a disconcerting experience.

The company operated a fleet of conventional city cars with one exception. There were 20 large cars of Stone & Webster "turtleback" design, built by different builders. These were the only such cars to run on narrow gauge rails, though standard and wide gauge versions operated in cities from Penn-

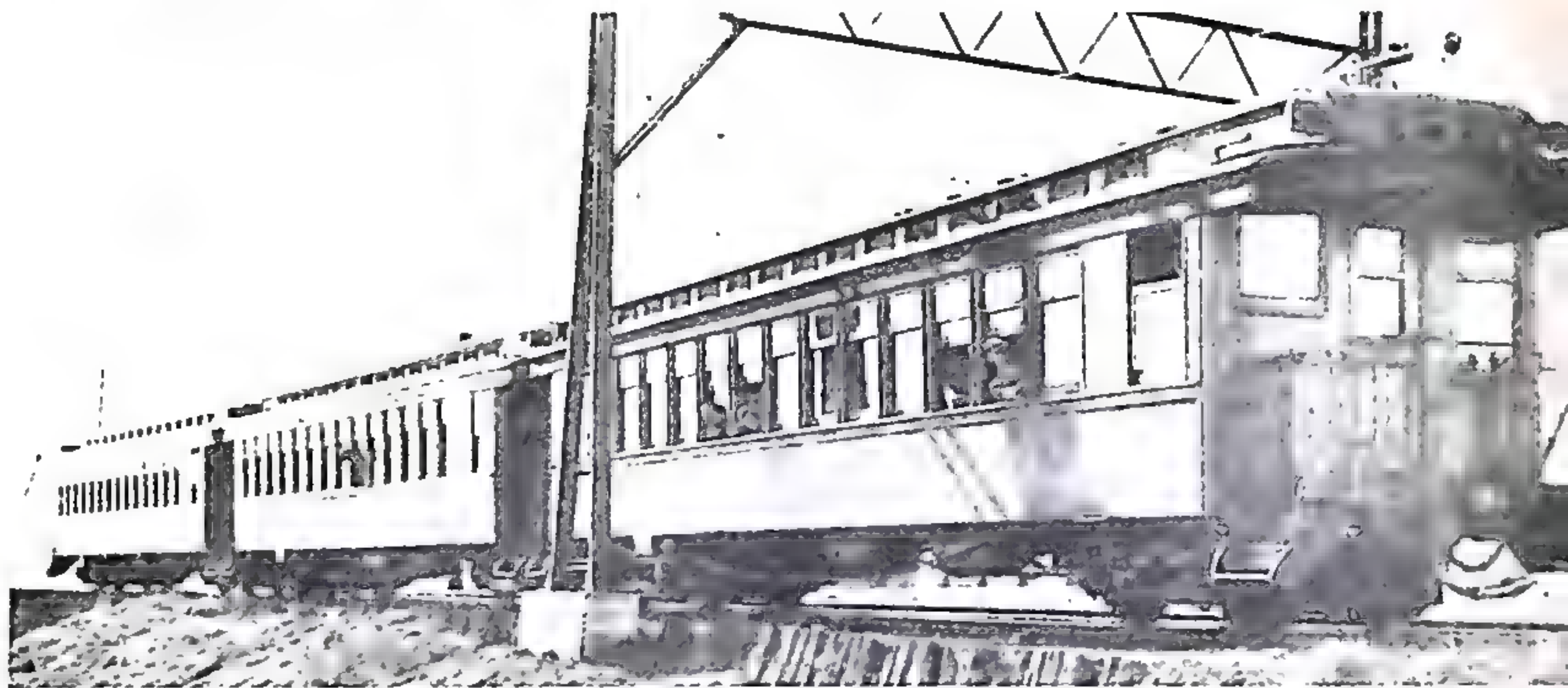


2000 miles by trolley! When these San Antonio Public Service cars were shipped to the Third Avenue Railway System in New York in Depression year 1934, each car had 10 to 15 riders, according to San Antonio veteran John K. Kight. John K. Kight photo.

Unlike the Birneys of Pueblo, these San Antonio cars were well maintained right up to the end of service, though in fairness to Pueblo, it must be recognized that the San Antonio cars ran only until 1933. Pueblo lasted until 1947. John K. Kight photo.

Honolulu's 15-bench crowd swallows were ideal for a Waikiki Beach outing.

Boston Revere Beach & Lynn ran these former steam road cars in multiple unit trains for commuters to Boston and Bostonians seeking a day at the beach. Several cars survive on the East Broad Top R.R. in Pennsylvania and modern rapid transit uses the old right-of-way.



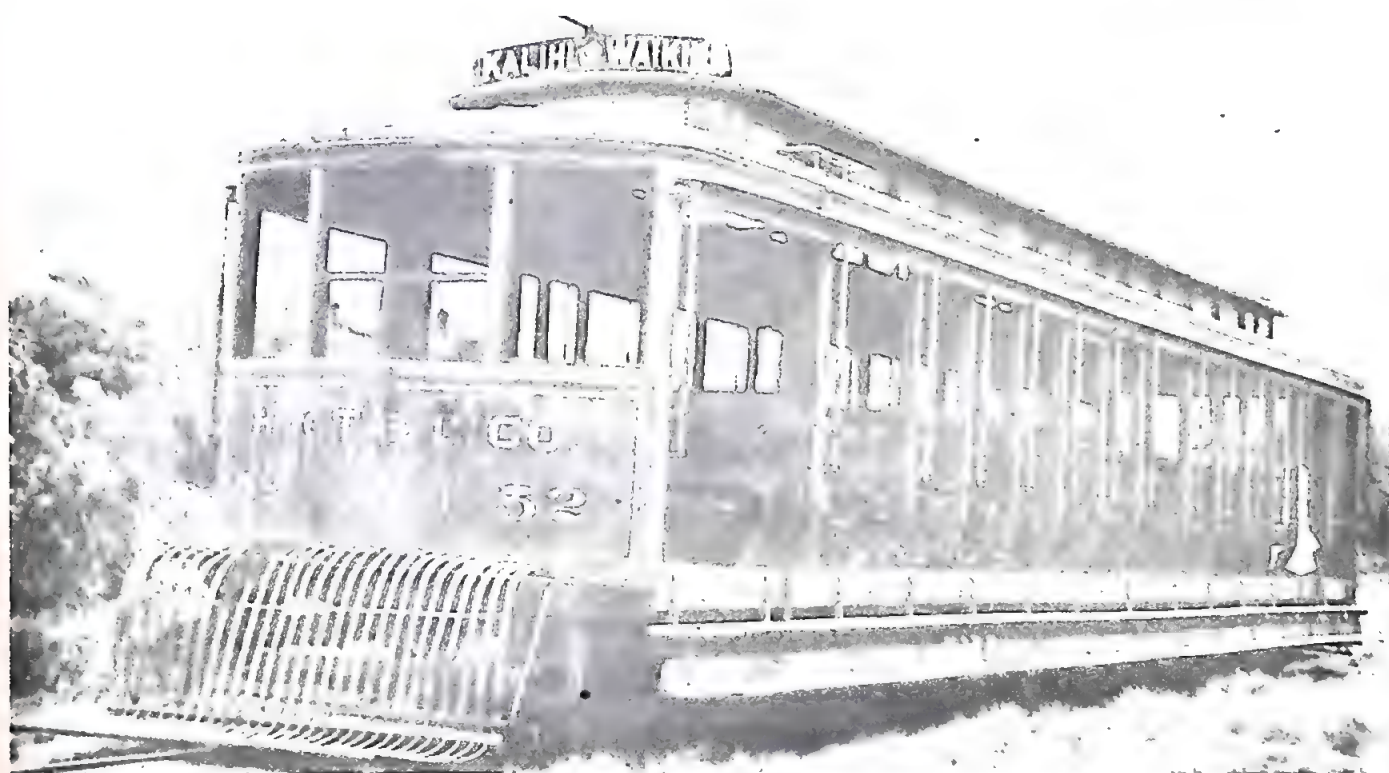
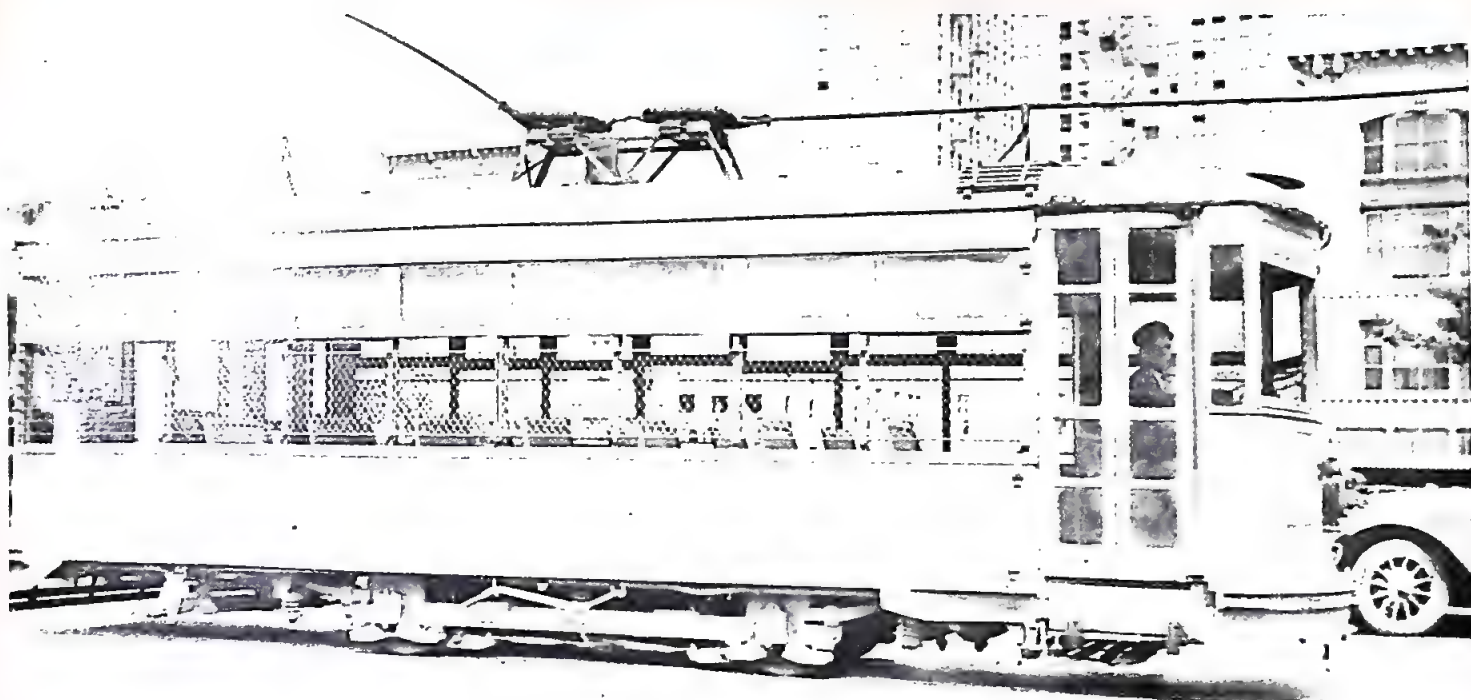
sylvania and Georgia to Texas and Washington State.

Dr. Thomas Conway, creator of the Cincinnati & Lake Erie, offered to assume responsibility for the company if the city fathers of Springfield would cease their efforts to enforce franchise requirements that his interurban pave and sprinkle the streets, and that they would forgive certain past-due taxes. His proposal was not accepted, and the local company's cars disappeared from Springfield in 1933. The C&LE provided city service with a Birney on its own line through town for several

more years.

Farthest east in New England there was perhaps the most unlikely of all narrow gauge lines—steam or electric. Beginning in 1875 the citizens of Lynn, Massachusetts had access to Boston via the Boston Revere Beach & Lynn R.R. This involved a 9-mile trip behind a 3-foot gauge Mason bogie locomotive to East Boston and a crossing of Boston Harbor on a BRB&L ferry. The line prospered, extended service eastward to Winthrop, and then as autos made inroads, saw business drop.

Electrification was considered the



answer. In 1928 catenary was erected, the narrow gauge coaches were given electric motor trucks and multiple unit equipment, and the Mason bogies were consigned to the scrappers. It was thus the last narrow electric created, but it didn't last long. It was the depression, and business fell off drastically. To save money, four street cars from the Eastern Massachusetts Street Ry. were placed on narrow gauge trucks and used for night service. The number of MU commuter trains was cut, but this was not enough. By 1939 the road was bank-

rupt, and the trains and ferries ceased operation in January, 1940.

There is a happy ending of sorts for the BRB&L, however. Trains of the Massachusetts Bay Transit Authority now operate over part of the old right of way, restoring rapid transit to the area.

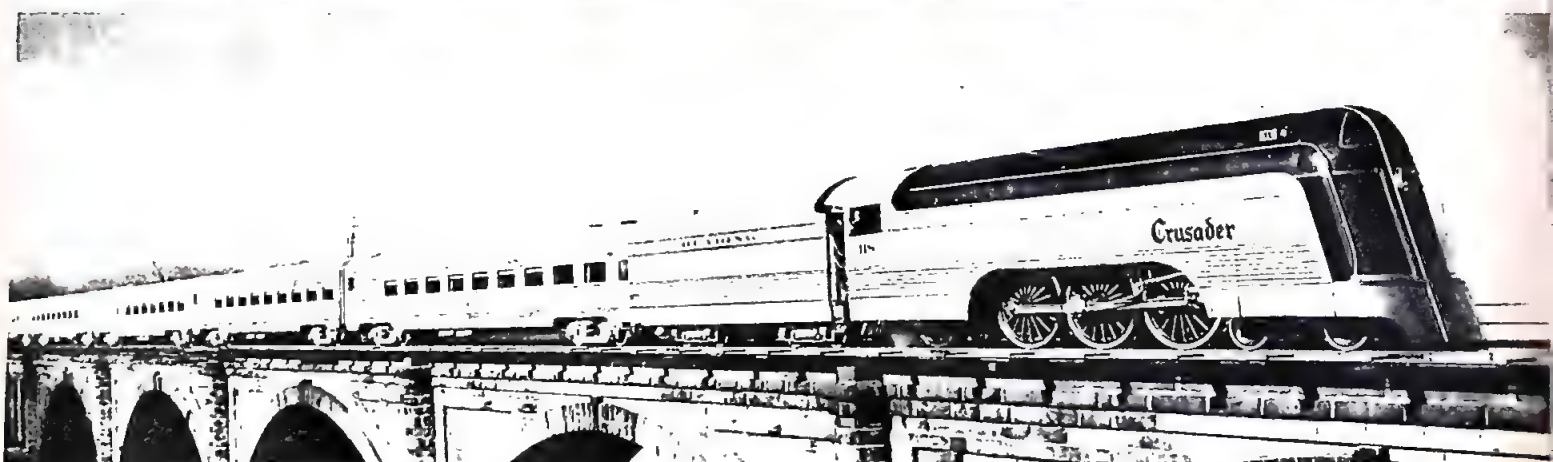
Of narrow gauge traction in general, little remains. A number of Los Angeles cars survive at Orange Empire Museum in Perris, California. Portland Council Crest and Master Unit cars mounted on standard gauge trucks are at operating museums and another

Council Crest car was preserved near its old right of way. The only Denver narrow gauge cars in existence are the two gauge trucks at Kennebunkport, Maine. One car is preserved as a museum piece in San Antonio, and former BRB&L coaches survive on the East Broad Top in Pennsylvania, though not in an electric configuration.

The narrow gauge steam fan is well served with operating museums, but narrow gauge traction is gone. If one judges by coverage in the fan magazines, except for Los Angeles it is largely forgotten.

STEAM AND DIESEL STREAMLINING

Dramatic and thundering is this Baltimore & Ohio streamliner with the ROYAL BLUE designed by Otto Kuhler.



The huge shroud smothered the Reading's CRUSADER steam locomotive in an enormous stainless steel box. The train looks more like a tinplate toy than a real steam locomotive.

Alco's answer to General Motors' "Streamliner Series" was this sharp tapered machine with 2,000 hp per unit. John Ahrens.



Pennsylvania Railroad's K-4s Pacific No. 3768 was given an aerodynamic cowl and briefly assigned to the BROADWAY LIMITED.



progress as symbols of streamlining.

The mad rush by America's railroads to streamline the passenger train was on by 1937. Such famous trains as Southern Pacific's *Daylight*, the Rock Island's *Rocket* trains, and Santa Fe's *Super Chief* hit the high iron. Overnight streamlining was the topic in every magazine across the nation. By now firms were streamlining automobiles, carpet sweepers, coffee pots, and even buildings in Art Deco fashion. A whole new vogue was established in America because of the railroads' foresight to dig itself out of the Depression.

When the first new diesel streamliners were introduced during 1934 and 1935, there were many fanciers who found the new motive-power to their liking. Some railroad men felt the diesel-electric brought uniformity and conformity in motive-power. Many railroad managers were reluctant to buy the experimental new equipment when traditional steam power had proven versatile over the years. Several railroads, however, were willing to compromise midway between the two alternatives—by keeping their old reliable steam locomotives and dressing them up in streamlined capes, skirts, and aprons so that they looked glamorously modern and racy.

The earliest steam locomotive to be adorned with such streamlined robes was the New York Central's "Commodore Vanderbilt," designed to haul the road's crack *Twentieth Century Limited*. This new image was accomplished by shrouding one of their Hudson type steam locomotives. The

Milwaukee Road, hungry for publicity, went one further. The road entered the streamline competition by ordering two fully-streamlined steam locomotives from the American Locomotive Company. To complement the new engines upon delivery from the builder, the road was busy building new coaches in their own shops. The new train was called *Hiawatha*, after the fleet of foot character in Longfellow's poem. The train was an immediate success.

The epidemic of streamlining struck the Reading Company in late 1937, and they clad a steam locomotive in shining stainless steel armor and emblazoned in heraldic blue from stem to stern, calling it *Crusader*. The New Haven ordered 20 streamline Hudson type steam locomotives and called them the *Shorliners* and the North Western ordered Hudson's which they named *Steamliners*. Not to be outdone, the Baltimore & Ohio hired Otto Kuhler to work over the *Royal Blue*. Kuhler's bullet nose shrouding of the old President class Pacific of 1927 vintage was fairly pleasing as was his treatment of the car exteriors. But the interiors looked obviously homemade when compared to the refined elegance of the professional work accomplished by Pullman or Budd.

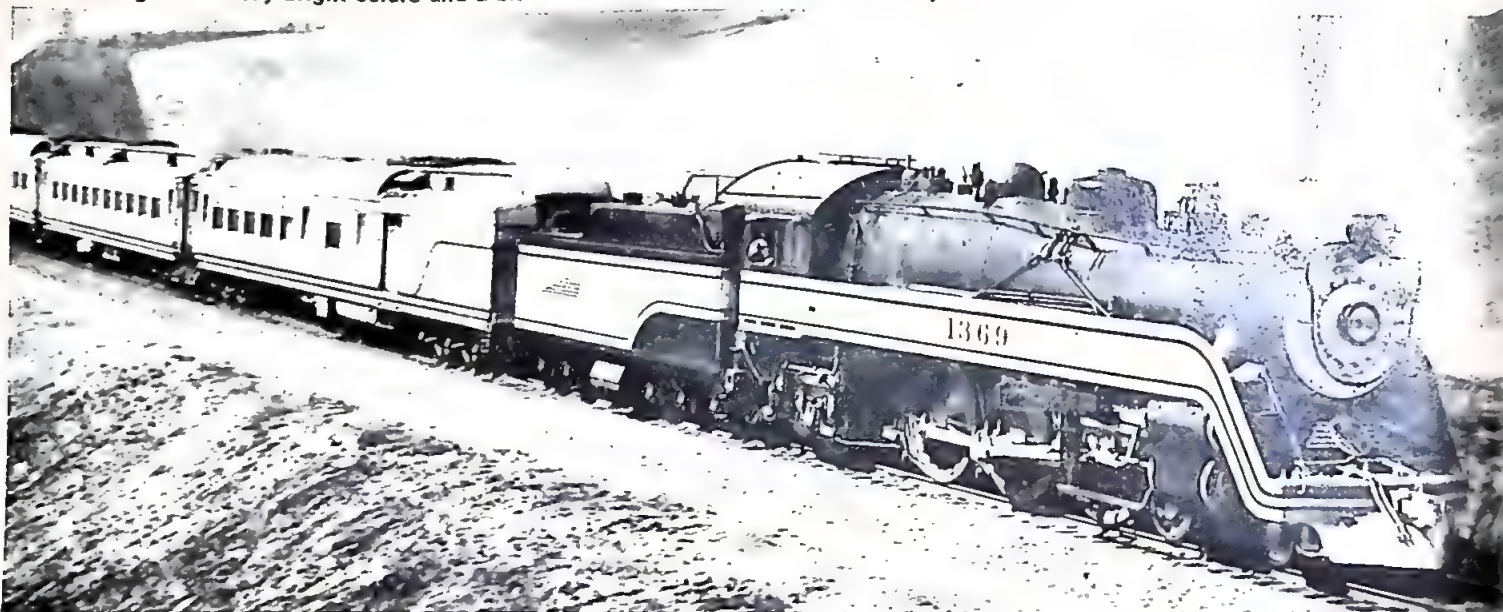
One of the most beautiful trains in the West was Southern Pacific's famous *Daylight*. Early in 1935, with the help of the Lima Locomotive Works engineers, the SP completed the basic design for their new *Daylight* steam locomotives. These new engines would include skyline casing, that acted as

a smoke lifter, and streamline skirting which would blend in with the cab and pilot. The new "Super-Power" would be capable of handling a 14-car train unassisted over SP's rugged Coast Line. To complement the new locomotives, Pullman was hard at work building new cars for the *Daylight*. The cars, like the locomotive, would be streamlined in design, having the characteristic mid-1930s corrugated ribbing outside and full width diaphragms to give the train the illusion of being a long, unbroken, flexible tube.

Many great trains were either rebuilt from the track up or established prior to World War II. Trains like Santa Fe's all-coach streamliner *El Capitan*, the lightweight streamlined *Twentieth Century Limited*, and Pennsylvania Railroad's *Broadway Limited*. Both the New York Central and the Pennsylvania established streamline service on these crack trains the same day—June 15, 1938. The Rock Island established more *Rocket* trains, the North Western began its famous 400 trains, and the Missouri Pacific its *Eagle* streamliners.

The diesel locomotive, which began life in 1925 in the shape of a homely boxcab, evolved in only a few short years into a sleek and glamorous streamliner. In 1937 Electro-Motive sold their first "Streamliner Series" (called E-units) to the Baltimore & Ohio and the Santa Fe. The units were impressive and elegant with their high cabs, sleek tapering prows, and smooth, clean roof lines. The air in-

Santa Fe's redesigned VALLEY FLYER was what a streamliner should not be. Streamlining was mostly bright colors and a bit of tin here and there. Santa Fe Railway.



take grilles of the first generation machines had been moved to the sides, leaving the nose completely smooth. The builder went into full production and by the beginning of World War II had sold 114 units.

Gone was the eccentricity and di-

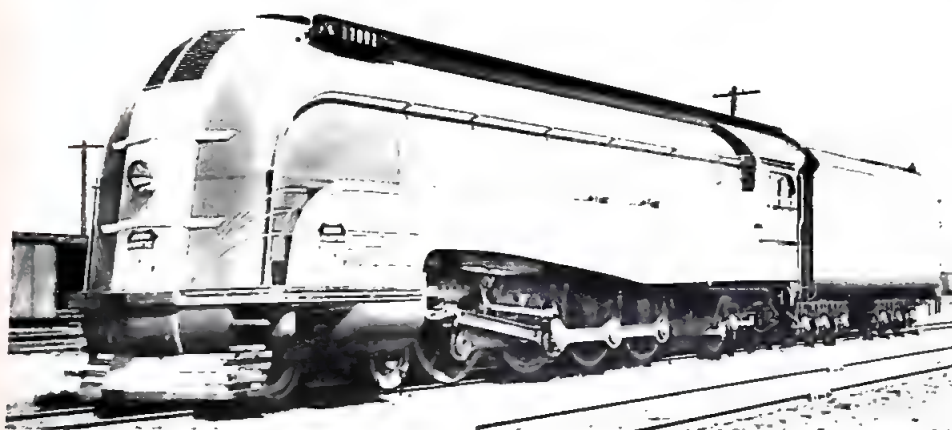
versity so characteristic of the earlier years of streamlining when each railroad had its own streamline image that could be identified by the individual shape and look of its locomotives. The Burlington had its shovel nose, the Union Pacific its bulbous front end,

and the Gulf, Mobile & Northern its snake like look. Now diesel streamliners were relatively speaking, stereotypes, look-alikes as purchased off the shelf—glamorous, but lacking in variety and individuality. Eventually there evolved a streamline diesel shape, so efficient as to be usable for passenger and freight service alike.

General Motor's Electro-Motive Division was not alone in the building of streamline diesel locomotives. American Locomotive Company and General Electric combined to come out with their streamlined diesels in 1940. Otto Kuhler was on hand to design the units, but it was not surprising that the styling was similar to the GM units with slight modifications. Alco models repeated the automobile hood, high cab, sharp tapered nose, and sloping windshield, thus increasing the monotony of dieselization. The mold of the diesel locomotive had been cast and it would last well into the 1950s.

All of a sudden the small and impecunious railroads became style conscious and tried to simulate genuine streamliners. It was obvious that some monstrosities should occur. In their rush to build streamliners after 1935, such roads frequently attempted to make an old steam locomotive look something like a diesel. Without any understanding of beauty or the basic principles of streamlining, railroad officials often fancied themselves as designers. Usually these makeshifts butchered the classic lines of many a handsome Hudson or Pacific type steam locomotive by using too much sheet metal shrouding. As an end result these self appointed streamline designers created some obese and graceless monsters.

The New York Central was the first
(Continued on page 78)



Union Pacific's FORTY-NINER's streamline shrouding was homemade and certainly looked it, a colossal metal bathtub complete with roller bearings and lightweight driving rods.

Pennsylvania's "Duplex" T-1 shark-nose was a bit of semi-streamlining of a modern and fast steam locomotive.
John Ahrens.



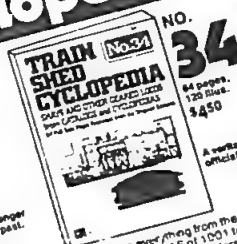
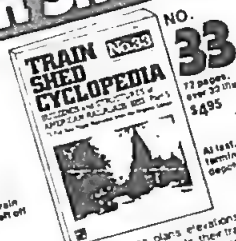
HERE THEY COME!

5 New Train Shed Cyclopedias

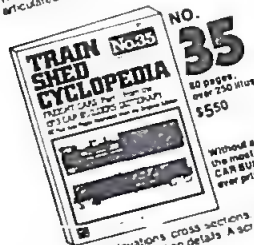
NO. 33
STEAM AND OTHER LOCOMOTIVES
 72 pages, \$19.95
 \$19.95

NO. 34
PASSENGER CARS
 64 pages, \$19.95
 \$19.95

NO. 35
FREIGHT CARS
 64 pages, \$19.95
 \$19.95



Everything you ever wanted to know about the steam locomotives of the late thirties. The tender coal pushers. The largest non-articulated steam locomotives. It's all here.



Plans, elevations, cross sections, plus many critical construction details. A scratch-builder's delight!

5 Spectacular New Releases: **\$54.95** a \$23.45 value—Yours for just **\$18.95**

calations plans, elevations, perspectives for many depots, their train sheds and many structures. What a great reference!

Special Bonus

Order all 4 volumes **NOW** and receive **NO. 41 FREE!**

43 people over 150 miles. \$300

Whoopi! And don't do it all the details of locomotive cars. From whoopianders to 10. Carries to 10. Shed NO.

Whoosh! And ding
dong! Here it is
all the details of steam
locomotive cabs
From whistles to lights
Sanders to tools
Carries on from Train
Shed NO. 40

834	TS10 1931-37 Rail Motor Cars	4 50
840	TS11 Caboose Cars 1879-1943	3 95
841	TS12 Tank Cars 1922-1943	4 50
842	TS13 Buildings & Structures (Pt. 2)	4 95
843	TS14 4-8-4's/Heavy Pass Locom 1927-41	3 95
844	TS15 Heavy Traction 1922-1941	4 95
845	TS16 Famous Passenger Trains 1943	3 95
846	TS17 Box Stock & Flat Cars 1943	3 95
847	TS18 Locomotives 1916	4 95
848	TS19 Buildings & Structures (Pt. 3)	4 50
849	TS20 Diesel & Gas Elec Locom 1920's & 1930's	5 95
851	TS21 1943 Passenger Cars	4 50
852	TS22 1938 Steam Locom (Pt. 1)	4 50
853	TS23 1938 Steam Locom/Tenders (Pt. 2)	4 50
854	TS24 Buildings & Structures (Pt. 4)	4 95
855	TS25 Electric Motor Cars 1888-1928	4 50
856	TS26 Railway Serv. Cars 1928-1943	4 95
857	TS27 Signals & Signal Symbols	2 50
859	TS28 Buda Catalog 1909	5 50
860	TS29 Voss Freight Cars 1892	5 50
861	TS30 Rail Motor Cars 1919-1928	4 50
862	TS31 Locom 1927 (Pt. 1)	5 50

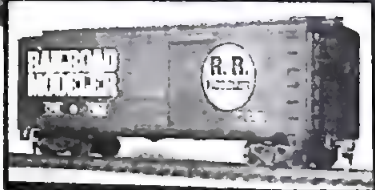
Box 631, Sierra Madre, Ca 91024

Enclosed is check, MO for \$.....

Please send the following: (Calif. residents add 6% sales tax.)

Name _____
Address _____
City _____
State _____ Zip _____

A black and white photograph of a model train car, specifically a boxcar, with the text "The Colorful Magazine of Trains" and "RAIL CLASSICS" printed on its side. The car is numbered "GPX 7950". The image is part of a magazine spread, with the left page showing the train car and the right page showing a close-up of a train wheel and track.



For mantel or conversation piece, this Rail Classics box car kit will provide 'that something different' for your desk, office desk or home book shelf. Only \$3.95 from Challenge.

BOX CAR 7950 Deering Ave. Canoga Park, CA 91304
Please send RRM HO Box Car
Kits @ \$3.95. Enclosed is: cash,
.... check, ... money order, for
\$..... (California residents in-
clude 6% tax.)

Name
Address
City State ZIP

FOREVER (Continued from page 25)

back ascending from its line in the Cuyahoga Valley to the Nickel Plate and CUT above. Inbound trains were backed up this grade, outward bound trains backed down.

The Wheeling & Lake Erie, which ceased operating passenger trains in 1938, never quite got around to using a graded line prepared for its tie-in with the other passenger carriers.

The management of the Pennsylvania Railroad was perverse when it came to spending money to get its trains into the new downtown terminal. It never did go along with the idea, probably because the expense of buying valuable downtown property was much too great. They elected to remain in the tomb-like Union Station on the lakefront. In later years this structure was torn down and Pennsy initiated its passenger trains from its station at East 55th Street.

On April 25, 1949, nearly 20 years after the opening of the Union Terminal, the Erie Railroad dieselized its passenger service between Youngstown and Cleveland and brought its trains at last into the Terminal. Before that time, because of the expense of electrifying and maintaining an extra crew on the CUT, and because of Erie's poor financial condition in 1930, it had been decided to continue the use of that road's old station at West Ninth St.

The new diesels obviated the need for a change of motive power and the Erie hoped that it could now boost its passenger business. So it plunked down \$1½ million to pay for the construction of less than a mile of connecting track and have a decided advantage over the Pennsy in competition for Youngstown and Pittsburgh traffic.

Cleveland's terminal station in its heyday was most impressive. The main concourse contained the gates and stairways to the tracks below as well as long bench-like seats in the waiting room area. At the far end a giant mural depicted the city's commerce. During World War II there were many occasions when the entire area would fill with thousands of people meeting friends or preparing for a journey of their own.

During those busy times there were some days when there were as many as 100 train movements through the Terminal in a 24-hour period. That, plus the many necessary switching moves, added up to an impressive and busy operation.

To mastermind track and train operations within the environs of the Ter-

minal itself a tower director and four levermen in "CT" Tower kept close control of all movements. CT Tower, with a 576-lever interlocking machine, (largest in the world ever constructed in one frame) controlled switches and signals as far away as 8000 feet, from East Ninth Street to the Nickel Plate connection.

The diesels, however, plus dwindling passenger business, spelled doom for

the electric operation. Soon diesels were run right through the Terminal and the railroad turned a deaf ear to complaints of diesel fumes from tenants above. The electrics went and GP7s took over the switching jobs.

Nickel Plate took off its last passenger trains on September 9, 1965. New York Central became Penn Central; only a skeleton service remained. An on-off last-gasp Amtrak train be-



Train #35, The Fast Mail, rounds a curve at Euclid Avenue. #35 was a New York-Chicago train with a leisurely schedule. Notice the single streamlined coach seven cars back.

Train #442, overnight from Cincinnati, rounds a reverse curve at the Nickel Plate interchange at West 38th St. as it slows on a misty summer's morning to pick its way through the switches at the Terminal.

The Mercury leaves the Terminal with electric power. Its low-windowed observation car was a delight for the buff who could sit and watch the scenery roll past and check the train's speed at the same time.

Photographer Cook is at East Ninth Street as train 43 West, a many-stops mail-express-passenger run, scoots underneath the Nickel Plate.





tween Buffalo and Chicago looked like Cleveland might hang on to through passenger train service. The strains of the welcoming brass band were hardly over when it became evident that sufficient funds to keep the train running were not forthcoming. And exorbitant terminal costs ate up more money. Amtrak threw in the sponge. The great underground trainshed was silent.

Well, not quite. Almost like a ghost

train, a shadow of the past hangs on, unbeknownst to most Clevelanders. Once a day, five days a week, the Erie-Lackawanna runs in a commuter train from Youngstown.

This vestigial service, an orphan operation 66 miles in length, arrives with commuters from the east at 7:40 a.m. A single unit E-8 and three cars return workers to their suburban homes, leaving the Terminal at 5:20 p.m. There is no announcement, no

sign at Track 13 to hint of an actual train departure. Soon this shadow of the past, too, may dissolve into history if the railroad has its way.

And then the skyscraper station will be left without inter-city trains. Someday, however, crowded highways may spur the need for more rail transportation. If and when that day arrives, the Cleveland Union Terminal will be waiting to resume its past role of efficient handling of rail passengers. 

THE BEST OF RAILROAD MODELER

132 pages packed with model railroading ideas.
Many articles that are now out of print are included
along with new features that you are sure to like.



- 1975 HO Diesel Survey
- Steam Locomotive Modifications
- HO and N Layouts
- Fascinating Structural Projects
- Secrets of Natural Scenery
- PLUS—A special 32 page section on building a complete HO layout: Step-By-Step

**AND 24 PAGES
OF COLOR**

At your local hobby dealer or newsstand . . .
or direct from Challenge.

Challenge Publications
7950 Deering Avenue
Canoga Park, California 91304

Please ship _____ copies of "THE BEST OF RAILROAD
MODELER" at 3.00 each. Enclosed is: ☐ Check, ☐ Cash,
☐ Money Order for \$_____

Name _____

Address _____

City _____ State _____ Zip _____

Allow six weeks for delivery.

STREAMLINE

(Continued from page 74)

to shroud and streamline a steam passenger locomotive by remodeling it with a smooth, shovel-nose front end, which made it far more diesel looking than many of the rebuilt steam locomotives to come. This engine was christened the *Commodore Vanderbilt*. Soon to follow was Burlington's *Aeolus* which was designed as relief power for the road's *Denver* and *Twin Zephyrs*. The Burlington put a big stainless steel bathtub shroud on one of their old steam engines and the appearance was similar to their famous diesels. The Milwaukee Road also discovered the advantages of makeshift streamliners. Finding themselves unable to afford costly new streamline engines they began to shroud locomotives to look like their famous *Hiawatha* engines.

Union Pacific cooked up a home-made streamline shroud for one of their Pacific and Mountain type engines for the *Forty-Niner*. The service was being established to supplement the *City of San Francisco* and to entice rail travel to the forthcoming Golden Gate International Exposition. The two locomotives were quite awkward looking and the leaf brown and yellow paint scheme did little to simulate a streamliner. For the same Exposition, the Santa Fe established the *Valley Flyer*, a make-shift streamliner that was certainly tacky as far as streamliners go. They semi-rebuilt standard coaches and placed wing like fenders on a couple of 4-6-2s.

The Lehigh Valley's first adventure into streamlining was the budget face-lifting of their *Asa Packer* in 1939. Not completely satisfied with their homemade image, the road hired Otto Kuhler to streamline the power for their *Black Diamond*. Kuhler provided a bullet nose shroud, voluminous shirting and a good deal of horizontal striping which served as speed lines. To match the locomotive, he reconditioned a number of old coaches and parlor cars; he was always, extraordinarily skillful in transforming old equipment into new cars with the help of bright colors and striping.

The diesel locomotive made great sales gains during the mid-1930s, but this was at the expense of steam. The last vestige of steam locomotive development came just prior to World War II. In their attempt to prove steam's superiority, such railroads as the Pennsylvania, Baltimore & Ohio, and the Norfolk & Western experimented with new engines of titanic dimensions. The Pennsylvania Railroad's giant T-1 4-4-4-4 type weighed nearly a million pounds and produced 65,000

pounds of tractive effort. When this giant got rolling it ran like a greyhound. The road's S-1 was also an extraordinary powerful machine and dramatically streamlined by Raymond Loewy, like his famous Pacific type locomotives of the mid-1950s. The Norfolk & Western's J-class 4-8-4s were also fast moving engines and could handle a 15-car train up the Virginia tidewater belt and over the Blue Ridge without a helper.

The whole streamline era was influenced by industrial designers such as Paul Cret, Henry Dreyfus, Norman Bel Geddes, Otto Kuhler, and Raymond Loewy. Their intention was to make trains look engagingly fast, efficient, and modern, while incorporating into them the important mechanical improvements that engineering vision had achieved. Only at first were the streamline trains faster, but streamliners looked faster, and were certainly more beautiful than standard Pullman green. Railroad streamlining began fading as America entered into World War II and the designers turned their sights on commercial products.

There was great optimism about the future of the passenger train at the end of the war. It was with the highest hopes that the nation's railroads set out to build the grandest passenger trains of all time. Railroads began to place sizeable orders for new cars. In 1946 the New York Central announced a colossal \$56,000,000 order for 720 new cars. By 1950 there were 350 name trains in operation throughout the country, most of them new, handsome, and well appointed streamliners.

In their drive to upgrade the passenger train, railroads continued the styling of the 1930s. However there were not as many radical innovations in passenger equipment after the war. The new trains in the 1930s were designed along established lines, such as lightweight construction, air-conditioning, a streamline profile with smooth roof lines, shrouded wheels, rounded tail ends, and color paint schemes, diesel motive power, and luxurious interior appointments.

One of the first postwar developments was the recreation car. Other attractions were the economical "Slumbercoaches," the "Dome" car, Hi-Level coaches, and "Astra Dome" dining rooms. Through 1951, new trains and new improvements were big news; then passenger traffic began to level out.

In the realm of locomotives, the trend toward dieselization established before the war continued. By the mid-1950s steam locomotives on passenger trains were a rare sight. Despite isolated examples of steam streamlining, the great bulk of postwar power was diesels. For the most part passenger

THE DIESEL YEARS



Robert P. Olmsted

\$13⁹⁵

The Diesel Years actually began back in the decade following World War I—when General Electric, Ingersoll-Rand, the American Locomotive Company, and the Baldwin Locomotive Works were experimenting with the diesel engine as a means of railroad motive power. This was a time when the Electro-Motive Corporation was founded to sell the railroad industry gas-electric rail motor cars in order to reduce the operating cost of branch line passenger service.

While the diesel underwent research and development, the steam locomotive remained "King of the Rails." Before long the diesel came rolling down the track—slowly at first, then rushed in during the streamline era of the early 1930's. By mid-decade the avalanche toward full dieselization of America's railroads was on. By the early 1940's the diesel had won its victory, and only World War II kept steam alive.

In the three decades since the end of the war, the nation's railroads have undergone what has been perhaps the most exciting motive power change in almost a century and a half of railroading, changes in technology so fundamental that it is difficult to avoid the use of the word "revolutionary."

The new diesel locomotives came in many colors and in many shapes, as Alco, Baldwin, Electro-Motive, Fairbanks-Morse, and General Electric battled for the market. By 1970, only the Electro-Motive Division of General Motors and General Electric remained as builders of America's diesel locomotives.

The Diesel Years then, is a photographic album of the revolutionary change in motive power, presenting some important diesel locomotive types, and some obscure ones too—all chosen to portray the machine that has dominated the railroad scene for the past quarter century.

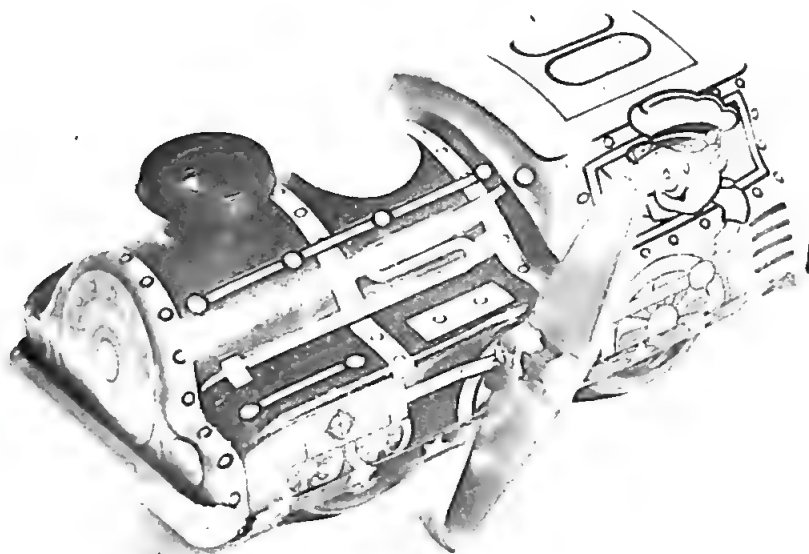
Come to trackside, and watch as EMD's wind up on the *Kansas Cityan*, as Alco PA's charge through Illinois during a storm, as FM's drum down the Connecticut River valley, as "Sharknoses" from Baldwin labor for the New York Central, and as General Electric's big double-engined U50's race west toward the setting sun on the Union Pacific. This book is your passport to *The Diesel Years*.

Golden West Books

P.O. BOX 8136 • SAN MARINO, CALIFORNIA • 91108

IT'S MORE THAN JUST WINDING UP THE TRAIN

RAILROAD MODELER brings you the answers to your questions and shows you how to have more fun with your layout.



Month after month the pages of *RAILROAD MODELER* are loaded with the latest information in the model railroad field.

Easy-to-do conversions for locomotives, rolling stock and structures. Latest new products with our own staff photos. See what the latest in model railroading is really like.

8 pages of color in each issue show you how to weather, build realistic scenery, and make your railroad like the real thing.

Steam and Diesel locomotive profiles in color. Original art, suitable for framing and commissioned by us for your pleasure.

Layout ideas—Military Railroading—European—Wiring Tips—These and countless other features and articles fill each issue of *RAILROAD MODELER*. Subscribe now to our special New Subscriber's Rate: Only \$15.95 for twelve big issues of the color railroad modeler's magazine.

SUBSCRIBE

Please enter my subscription for one year to *RAILROAD MODELER* at only \$15.95

Enclosed is my ☐ Cash ☐ Check ☐ Money Order

Name

Address

City State Zip

Send to:

Challenge Publications, 7950 Deering Avenue, Canoga Park, California 91304

diesels (aside from the difference in paint schemes) had a rubber stamp look. General Motors hegemony controlled the bulk of the diesel locomotive market through their Electro-Motive Corporation. The other diesel builders, such as Alco, Baldwin, and Fairbanks-Morse, felt obligated to imitate GM's styling in order to grasp a share of the market. Gone forever was the diversity in locomotive streamlining that came about between 1934 and 1940.

As the erosion in passenger traffic became obvious during the decade of the fifties, imaginative railroad managers searched for ways to attract new business. Since streamlining was credited with saving the country's Depression-crippled railroads, many roads thought something new just might work again. As a result there appeared on the scene several low-slung experimental trains—extra lightweight and super-streamlined—that were highly reminiscent of the Burlington's *Zephyr* and Union Pacific's M-10000 streamliners 20 years earlier. But the circumstances were quite different; there was more competition now. The general public was also highway-minded and the airlines were taking a huge bite of the business traffic and the summer tourist. Such experimental trains as Pullman's *Train-X*, the *Talgo*, the *Keystone*, and the *Aero-train* garnered little publicity for rail travel through the media except for mentions in periodicals such as *Popular Mechanics*, and other technical publications.

With the arrival of Amtrak on May 1, 1971, the system hoped to maintain streamliner service to the nation by providing a pool of new and modernized cars, and locomotives. Only this year have we seen any new equipment and this on the exclusive New York-Washington locomotive drawn Metroliner schedules. While Amtrak has presented a bright new face and experimented with Turbo trains, the future of the streamliner certainly looks uncertain from this vantage point in 1976. The Golden Era of the streamlined passenger train may be past, but there is still a measure of excitement about riding a crack express train, even if you are not a passenger train enthusiast.

EDITOR'S NOTE: All those interested in streamlining will be pleased to learn that Robert Reed has just completed a full length book on the subject entitled *THE STREAMLINE ERA* released by Golden West Books in October 1975. This 300 page book with more than 500 illustrations and color plates features the entire streamline story. A review of the volume appears in our books section in this issue.



SCHEMATIC TRACK DIAGRAMS of the ERIE LACKAWANNA RAILWAY

NEW YORK
DIVISION

\$12.50

SCRANTON
DIVISION

W.H. Sheppard
P.O. Box #812
Denville, N.J. 07834

Softcover 80 pages 8 1/2 x 5 1/2"

"As reviewed in Summer Railfan Magazine"

RAILWAY PASSENGER CAR ANNUAL

New Edition Volume II, 1975 \$5.00

Send for free details — See your
Hobby or Book store.

R.P.C. PUBLICATIONS

P.O. Box 296

Godfrey, IL 62035

"American Short Line Railway Guide"

Edited by Ed Lewis. Covers all class II carriers. Location, traffic, revenue, corporate history, ownership and engine rosters for 280-plus line haul companies. Many, many photos. Location and ownership of switching roads. Abandonments since 1945. Color covers. Softbound \$7.95. Limited hardbound edition \$12.95.

THE BAGGAGE CAR

Box 223, Strasburg, PA 17579

ORIGINAL BALDWIN DIESEL LOCOMOTIVE OPERATOR'S MANUALS FINAL OFFER

These rare manuals, long out of print, must be eliminated from our files before moving to new offices early in 1976. Send stamped, addressed envelope for new list.

BALDWIN-HAMILTON COMPANY

P.O. Box 2105

Wilmington, DE 19899

HQ for BLW Photos!

"A BOON to rail historians, including TRAINS!" So says David P. Morgan of the span 1860-1950, depth 8000 photos, and service of H. L. Broadbelt's original collection of Baldwin Locomotive Works negatives.

100-page alphabetical index. \$5 (including six 8x10 prints of your choice). Prints 4x7 25¢. 8x10 50¢. If the engine bore a Baldwin plate, we've almost certainly got it—from 0-4-0 saddle-tankers to Mallets. No wonder D.P.M. acclaims Broadbelt as "THE Baldwin photo reference." Money back guarantee. No dealers, please: railfans only. Write

H. L. BROADBELT

146 Princess Margaret Drive

Newport News, Virginia 23602

RAIL ANTIQUE CATALOGUE

Whistles, watches, China, toys, lanterns, locks, keys, magazines, postcards, oilers, matches. Caboose stoves and hardware.

3 month subscription, 50¢

CABOOSE ANTIQUES

Magnolia Star Rt.

Nederland, CO 80466

Railroad T-shirts

Colorful logos silk screened on white Healthknit T-shirts. Choice of BN, NP, GN, SP, UP, CP, PC, SF, Milw., Southern, Puget Sound & Snoqualmie Valley RR, Iron Horse Restaurant. Sizes: S, M, L, XL. \$3.95. Dealer inquiries invited.

The Iron Horse

311 3rd Ave. So., Seattle, WA 98104

It is not easy to call yourself a Penn Central railroader, but is much easier to call yourself a Penn Central railfan, and if you are, then PC RAILFAN is for you.

Every issue of PC RAILFAN gives you accurate "up-to-date" information on the Penn Central and its many subsidiary lines, plus a lot of pictures not found in other Penn Central publications. \$12.00 a year.

PC RAILFAN

133 Dulles Dr.

Dumont, N.J. 07628

RAILROAD BOOKS

(Continued from page 11)

Santa Fe's Diesel Fleet, by Joe McMillan, published by Chatham Publishing Co., P.O. Box 283, Burlingame, CA 94010. 150 pages, 8 1/2" x 11", \$12.95.

Long ignored by railroad oriented publishing houses, the diesel fleet of the Santa Fe finally has a first rate work dedicated to it from a very knowledgeable author.

They're all here, the fleets of GP7s and SD45s, Alligators and hordes of Fs, the early Es and boxcabs. The system oddballs are very well covered also, including the lone Alco RS2, the pair of Budd RDC units, Baldwin centercabs and on and on. Even the narrow gauge tie plant locomotives are nicely done. Not directly related to the title but still quite welcome are brief chapters on the rotary plows, cabooses, MW cars, business cars and so on.

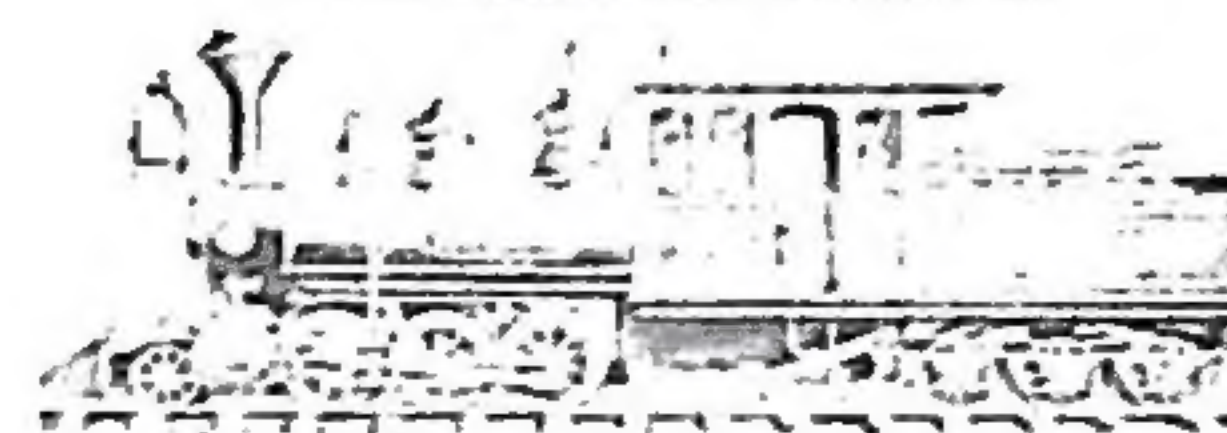
While an overall excellent effort by McMillan, the book does suffer from a slight of organization, seemingly a bit too jumbled. Considering the book is alone in its field however, and contains a wealth of readable information, more than makes up for this.

There are numerous rosters, and most important, the various renumberings of the various fleets such as the FTs. As any enthusiast knows, the renumberings are quite complicated. McMillan straightens much of this out in a very readable roster.

The CF7 rebuilding project is nicely covered, as well as such items as the radio control cars, and slugs. Publicity photos are held to an absolute minimum with good clean, informative photos filling every page.

Despite its minor flaws, "Santa Fe's Diesel Fleet" is a superb first effort by McMillan and should prove invaluable to anyone who has ever tried to follow and understand the road's internal combustion history. D.C.L.

PRESENTING



THE BRECKENRIDGE

Denver, South Park, and Pacific
Narrow gauge locomotive of 1879

HANDSOME, SOLID COPPER
ETCHINGS MOUNTED ON
BEAUTIFUL AMERICAN CHERRY
OR WALNUT

The character and charm of the 19th century "Iron Horse" etched on heavy solid copper, in exquisite detail. Each etching is approximately 6" x 9" in size and weighs over one pound. It is mounted on a plaque of solid, hand finished, American cherry or walnut (please specify). Also available as part of this series is the "MT. WASHINGTON," a lovely 2-6-0 of 1879 of the BOSTON, CONCORD and MONTREAL and "No. 19," a handsome American type (4-4-0) of 1886. \$39.95

BAC and MC accepted, please include \$2.25 for postage & handling. Texas residents please add 5% tax.

THE IRON HORSE

Dept. R POB 473, Denton, TX 76201

No one else
can give us
what you
can.

(Join Us. Please.)



The American
Red Cross.
The Good
Neighbor.

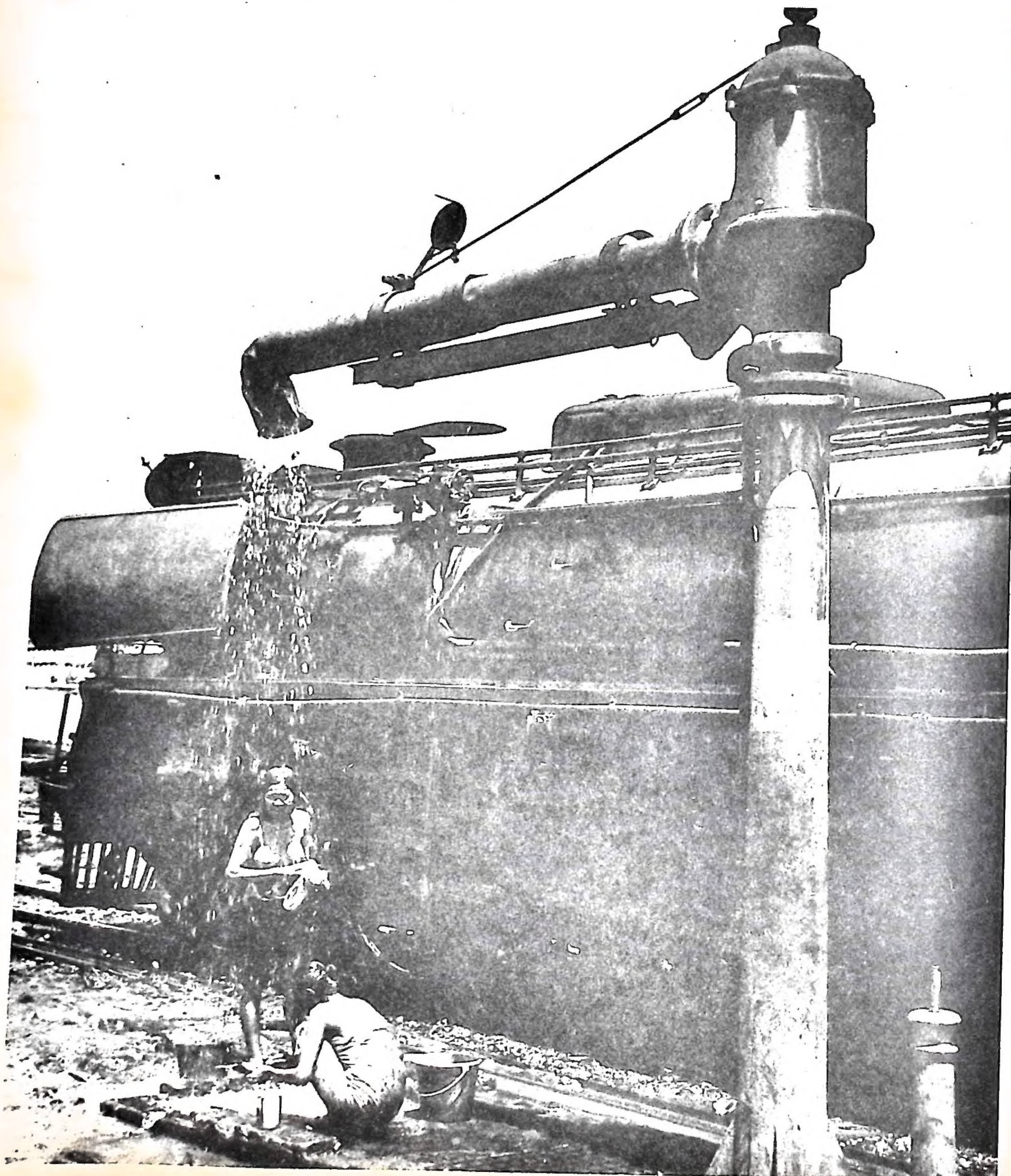
A Public Service of The Magazine & The Advertising Council

THE UNITED WAY:

Thanks to you, it's working.



DERAIL



'76 Calendars

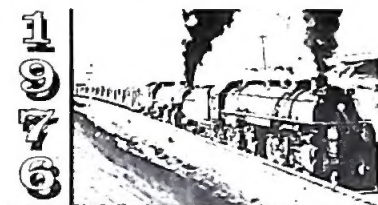
Each Calendar is 11" x 17" spiral bound with 13 different views of popular railroading scenes as noted. Work of the nation's leading photographers, each view suitable for framing.

New This Year!



**NARROW GAUGE
RAILROAD
CALENDAR**

Narrow Gauge Calendar \$2.00



**STEAM
RAILROAD
CALENDAR**

Steam Calendar \$2.00



**ELECTRIC
RAILROAD
CALENDAR**

Electric Calendar \$2.00

Appointment Calendar

56 different photos make this the most wanted calendar in railroading. Scenes include both steam and electric railroading. 5 1/2" x 7 1/2" .. \$2.50

STUDIO

Box 631, Sierra Madre, Ca 91024

Please ship the following:

..... Steam Calendar at \$2.00
..... Electric Calendar at \$2.00
..... Narrow Gauge Calendar at \$2.00
..... Appointment Calendar at \$2.50

ENCLOSE 25¢ FOR HANDLING

Name
Address
State Zip

RR JEWELRY & GIFTS

A complete line of fine quality Gift & Souvenir items. Tie tacks, lighters, money clips, mugs, many more.



CHINA COFFEE MUG

#1 Rio Grande 7.00
#2 Santa Fe 7.00
#3 Southern Pacific 7.00
#4 Union Pacific 7.00
#5 1880 Locomotive 7.00



TIE TACK—SILVER FINISH

#13 Rio Grande emblem 4.00
#14 Santa Fe winged emblem 4.00
#15 Southern Pacific emblem 4.00
#16 Union Pacific shield emblem 4.00
#17 1880 Locomotive design 4.00



**SLIM LINE LIGHTER—
GOLD FINISH**

#25 DRGW, butane .. 12.00
#26 ATSF, butane .. 12.00
#27 Espee, butane .. 12.00
#28 U.P., butane .. 12.00
#29 Loco, butane .. 12.00
#30 DRGW, fluid .. 9.00
#31 ATSF, fluid .. 9.00
#32 Espee, fluid .. 9.00
#33 U.P., fluid .. 9.00
#34 Loco, fluid .. 9.00



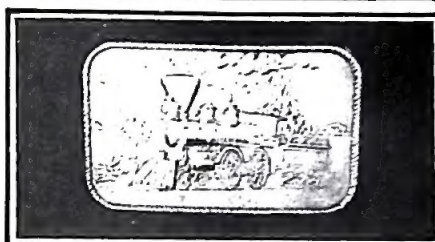
KEY CHAIN—GOLD FINISH

#35 Rio Grande emblem 4.00
#36 Santa Fe winged emblem 4.00
#37 Southern Pacific emblem 4.00
#38 Union Pacific shield emblem 4.00
#39 1880 Locomotive design 4.00



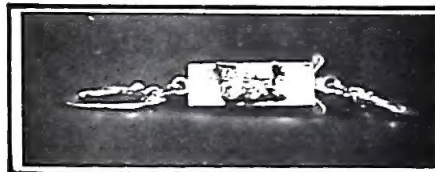
**MONEY CLIP—
GOLD FINISH**

#45 Rio Grande 4.50
#46 Santa Fe 4.50
#47 Sou. Pacific 4.50
#48 Union Pacific 4.50
#49 Locomotive 4.50



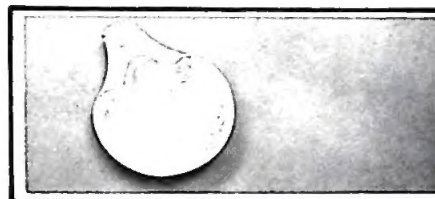
BELT BUCKLE

#68 Locomotive, gold finish 12.95
#69 Locomotive, silver finish 10.50



PULL APART KEY CHAIN—GOLD FINISH

#40 Rio Grande emblem 4.00
#41 Santa Fe winged emblem 4.00
#42 Southern Pacific emblem 4.00
#43 Union Pacific shield emblem 4.00
#44 1880 Locomotive emblem 4.00



CANDY DISH / ASH TRAY

#50 Rio Grande emblem 11.00
#51 Santa Fe winged emblem 11.00
#52 Southern Pacific emblem 11.00
#53 Union Pacific shield emblem 11.00
#54 1880 Locomotive design 11.00



**LETTER OPENER
WITH CASE**

#55 Rio Grande 6.00
#56 Santa Fe 6.00
#57 Sou. Pacific 6.00
#58 Union Pacific 6.00
#59 1880 Locomotive .. 6.00

STUDIO—Box 631, Sierra Madre, Calif 91024

Please enter my immediate No. \$
order for the following:
Cash, check or M.O. is on No. \$
closed. ALL ORDERS SHIPPED
PREPAID ON ARRIVAL WITH No. \$
FULL MONEY BACK GUAR. No. \$
ANTEE. California residents No. \$
add 6% sales tax. No. \$

NAME

ADDRESS

CITY

STATE ZIP

Challenge has a magazine for every one ...

**CHALLENGE
PUBLICATIONS, INC.—
AMERICA'S LEADING
PUBLISHERS OF
SPECIAL INTEREST
MAGAZINES.**

**ON SALE AT
LEADING
NEWSSTANDS
EVERYWHERE**

